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LETITIA JAMES  
ATTORNEY GENERAL

DIVISION OF ECONOMIC JUSTICE  
ANTITRUST BUREAU

December 17, 2019

**By ECF Filing & Hand Delivery**

Hon. Victor Marrero  
United States District Judge  
500 Pearl Street  
New York, NY 10007-1312

Re: *State of New York, et al. v. Deutsche Telekom, et al.*, 1:19-cv-05434-VM(RWL)  
Plaintiff States' Letter Motion to Admit Defendants' DT's Workshop Documents

Dear Judge Marrero,

Defendants are attempting to exclude certain documents produced by Deutsche Telekom (“DT”) and/or T-Mobile (the “Workshop Documents”), on the basis that the documents purportedly contain McKinsey consultant statements that cannot be attributed to them. Exh. A (PX 339).<sup>1</sup> On day two of the trial, the Court preliminarily sustained an objection from the bench concerning one of the Workshop Documents during the testimony of Mr. Langheim. Exh. B (trial transcript) at 310:2-313:16; 315:3-316:3; Exh. C (PX 329).<sup>2</sup> At the time, the Court ruled against admissibility on the basis that “there’s no indication that the client controlled the development of the content.” Exh. B at 315:18-19.

Plaintiff States respectfully submit that the trial testimony of T-Mobile executive Peter Ewens would have laid the necessary foundation for these documents. Because Defendants have chosen to drop Mr. Ewens as a trial witness, Plaintiff States write instead to provide the Court with the attached documents and testimony in order to lay that foundation. The documentary record surrounding the drafting of these materials, together with deposition testimony from two of Defendants’ executives, Mr. Ewens of T-Mobile and Hannes Wittig of DT, demonstrates that these documents were prepared by and completely controlled by DT, and that the contents were fully embraced by and adopted by DT, to the point that a slide from them was adapted for use in several draft iterations of a September 2018 board presentation.

<sup>1</sup> In accordance with the Court’s Trial Practices VIII. regarding exhibits, Plaintiff States submit only the pages of Exhibits A C, E, and H that are relevant at trial and for this motion. Plaintiff States attest that they are familiar with the full contents of each of these documents, that they possess and will maintain a copy of each entire document until the Court’s final disposition, and that the excerpts of these exhibits are authentic copies of the relevant portions of the documents.

<sup>2</sup> Exhibit C contains privilege redactions. Initially, DT and TMUS redacted each of these documents for privilege; after being challenged, they withdrew their privilege assertions, but did not unredact every iteration of these documents in their productions.

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This evidentiary record is sufficient to lay a foundation and establish that these documents are exempted from the definition of hearsay under Rule 801.

**Background**

The Workshop Documents were created in connection with two workshops held in Germany in December 2015. (See Ewens Deposition transcript, attached as Exhibit D hereto, at 47:7-16). Documents show that those workshops were scheduled by Mr. Langheim. Exh. E (PX 802), p. 3, and that Mr. Langheim hired the consulting firm McKinsey to facilitate the discussions. Exh. F (PX 796). The Workshop Documents prominently display DT's logo, and do not display McKinsey's logo. The Workshop Documents list Mr. Langheim and Mr. Ewens as participants (although Mr. Langheim disputes how much of the workshops he actually attended), and Mr. Ewens emailed John Legere on December 3, the day of the first workshop, to report that one of Langheim's ideas "is that if we can't get 4-3 consolidation the industry is headed for commoditization and DT should limit their exposure in the US." Exh. F (PX 796)

The fact that the Workshop Documents were created by DT with input from T-Mobile is apparent from evidence and testimony found elsewhere in the record. In a November 14 email before the first workshop, DT employee Steffen Stern describes at length DT's substantive preparations for and content of the meetings, before noting that McKinsey was merely "supporting on the topic." Exh. E (PX 802), p. 2. Mr. Stern then follows up in the same email chain with a November 29, 2015 email sent solely between DT and TMUS employees anticipating a conference call, to attach "a current working draft", "[i]n case we decide to jump into the workshop document for next week." *Id.*, p.1. In addition, a December 7, 2015 email sent between the dates of the two workshops between only Mr. Stern and Mr. Ewens shows Mr. Stern proposing, as next steps, that "we start to create a few slides" and "we align with you starting ca. mid of this week to jointly bring the document to a good shape for next week's workshop." Exh. G (PX 800), p. 2. The bottom line is that while McKinsey appeared to have some facilitating role for the meetings themselves, it is apparent that DT and TMO employees created, managed, and controlled the content of the Workshop Documents.

At his deposition in this matter, Mr. Ewens gave conflicting testimony, first stating that "to my recollection, those materials were prepared by McKinsey for DT," (See Ewens Deposition transcript, Exh. D, at 44:11-16) but then confirming that "[t]his was created by Deutsche Telekom," (Id. at 48:13-18), and referring to the Workshop Documents as being prepared by DT or as being DT documents another nine times.<sup>3</sup> Mr. Ewens further testified that Mr. Stern asked him to participate and assist in preparations for the workshop, including telephone interviews in advance of the workshop, (Id. at 46:2-47:16), and that T-Mobile "provide[d] information [reflected in the Workshop Documents] that was responsive to DT's questions that they had in advance of the first workshop." (Id. at 82:21-83:7). Mr. Ewens also attributed directly to DT the ideas and theories conveyed in these materials, e.g. "what it meant to me was a DT idea that we shouldn't follow Sprint into price wars." Id. at 97:13-20.

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<sup>3</sup> See Ex. D at: (1) 58:15-23; (2) 59:1-10; (3) 59:24-60:1; (4) 61:23-62:2; (5) 64:14-18; (6) 89:10-12; (7) 89:18-21; (8) 95:22 ; and (9) 99:12-13.

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Finally, it is clear from other materials that DT considered the material to be DT work product. Several draft iterations of DT board presentation documents from September 2018 contain portions of the Workshop Materials, including an updated and substantially identical version of a slide from one of the Workshop Documents. Compare Exh. A, PX 339 p. 16 (“Today, the US Telco Market is More Attractive than European Portfolio Markets”) with Exh. H, PX 386, p.25 (“The US Telco Market Remains More Attractive than European Portfolio Markets”). When shown these slides in the 2015 and 2018 documents, Mr. Wittig testified that “it seems some of these pages were apparently, let’s say, used as frameworks in future – to structure future discussion.” See Exh. I, Wittig Deposition transcript at 135:18-133:25).

### Argument

A statement of a party opponent is by definition “not hearsay,” so long as any one of five enumerated conditions is met. Fed. R. Evid. 801(d)(2)(A)-(E). For such documents, there is no need to invoke or satisfy Rule 803’s hearsay exceptions because the document is not hearsay. Here, Plaintiff States satisfy two separate conditions establishing that the Workshop Documents are non-hearsay party opponent statements.

**First**, these documents were “made by the party in an individual or representative capacity” under Rule 801(d)(2)(A). As noted above, the evidence from the discovery phase of this case showed that the exhibit is a “DT document”, made with input from DT and/or T-Mobile personnel, that DT led the workshops at which they were presented, that they were edited and sent by a DT executive to Mr. Ewens.

“Rule 901 provides that the requirement of authentication or identification as a condition precedent to admissibility is satisfied by evidence sufficient to support a finding that the matter in question is what its proponent claims. Rule 901 does not erect a particularly high hurdle, and that hurdle may be cleared by circumstantial evidence.” *United States v. Tin Yat Chin*, 371 F.3d 31, 37 (2d Cir. 2004) (internal citations and quotation marks omitted). “[A]ll doubts at a bench trial should be resolved in favor of admissibility.” *Commerce Funding Corp. v. Comprehensive Habilitation Servs.*, No. 01 Civ. 3796 (PKL), 2004 WL 1970144, \*5 (S.D.N.Y. Sept. 32, 2004) (citation and internal quotation omitted). Moreover, “the proponent of the evidence is not required to rule out all possibilities inconsistent with authenticity, or to prove beyond any doubt that the evidence is what it purports to be.” *United States v. Dhinsa*, 243 F.3d 635, 658 (2d Cir. 2001) (citations and quotes omitted). Where there has been a *prima facie* showing, the opponent’s evidence to the contrary goes to credibility, not admissibility. *Mendez v. Int’l Food House Inc.*, No. 13 Civ. 2651 (JPO), 2014 WL 4276418, \*1 (S.D.N.Y. Aug. 28, 2014).

**Second**, the relevant statements in the document are ones “the party manifested that it adopted or believed to be true” under Rule 801(d)(2)(B). *Schering Corp. v. Pfizer Inc.*, 189 F.3d 218, 238-39 (2d Cir. 1999) (noting that the Advisory Committee “recommends ‘generous treatment of this avenue to admissibility’” and holding that a survey designed and commissioned by a company qualified under 801(d)(2)(B)). As shown by the documents and Mr. Wittig’s testimony, at least some of the Workshop Documents were used as frameworks for future discussion within DT, including in the fall of 2018, after the merger was announced.

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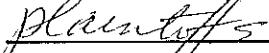
For these reasons, the Workshop Documents, including the last version of the slide deck (PX 339) and related materials (PX 329, 800, 802), are not objectionable hearsay, and Plaintiff States have established a foundation for their admittance. Defendants are free to present their contrary arguments, if they choose, but only as to the weight or credibility of the evidence. There is no basis to preclude them altogether.

Respectfully submitted,



Amber Wessels-Yen  
Assistant Attorney General

The Clerk of Court is directed to enter into the public record  
of this action the letter above submitted to the Court by



SO ORDERED.

  
12-20-19

DATE

VICTOR MARRERO, U.S.D.J.

# DTAG - DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL

Consolidated contents

17.12.2015

As per workshop  
discussions

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Case: 1:19-cv-05435-VM

P\_Ex\_339

DT-LIT-00018077

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# DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL



## Context

DT has 2 large portfolio elements besides Germany and UK: TMUS and DTEU

- TMUS delivered strong performance over past 2 years<sup>1</sup> and drives DT's growth
- EU portfolio has been struggling<sup>2</sup> and recovery to stable business is uncertain

In consequence, TMUS gained more importance within DT (revenues and EBITDA) while the EU portfolio has lost in relevance

However, stability of TMUS business model in long-run unsure given its sub-scale position, competitive environment, and potential market changes

<sup>1</sup>+20% revenue from Q2/13 to Q2/15, +34% total customers from Q2/13 to Q2/15  
<sup>2</sup>-8% revenue from Q2/13 to Q2/15  
 Source: DT&G



## Objective

Create a deeper understanding of differences in US vs. DTEU portfolio market environment, structure and attractiveness

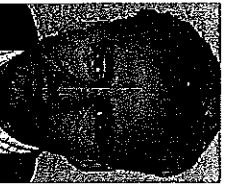
Identify major trends for the US that can disrupt current telco business models

Develop potential market "end-game" archetypes for the US

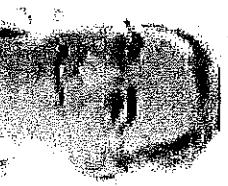
Outline options for TMUS to address key challenges in respective "end-game" archetypes (i.e., defining a winning position)

# WORKSHOP PARTICIPANTS AT A GLANCE

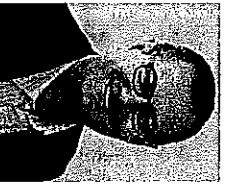
## DTAG



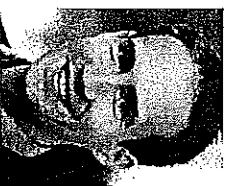
**Thorsten Langheim**  
Head of Strategy &  
M&A DTAG



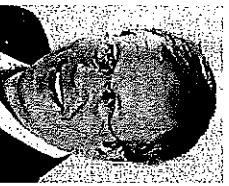
**Peter Ewens**  
EVP Corporate Strategy  
T-Mobile US



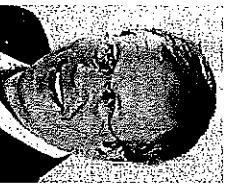
**Roland Doll**  
VP European Affairs  
DTAG  
(WS I only)



**Matthias Budde**  
SVP Group Strategy &  
Transformation DTAG



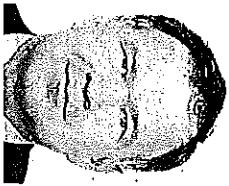
**Steffen Stern**  
VP Portfolio Strategy  
DTAG



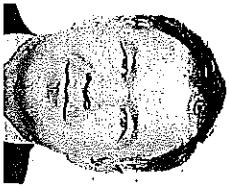
**Dr. Volker Stapper**  
VP Competition Law  
DTAG  
(WS II only)



**Ewan Duncan**  
Director



**Peter Bisson**  
Director  
(WS I and  
1st half of WS II)



Source: Team analysis



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# EXTENSIVE EXPERT INTERVIEWS CONDUCTED TO UNDERSTAND MARKET DYNAMICS



Endre Holen

Macro trend perspective on US market



USA



Brendan Gaffey

Macro trend perspective on US market



Europe



Stagg Newman

Regulatory expert (former CTO of FCC)



Joy Chen

Adjacencies and future business models



Ewan Duncan

Macro trend perspective on US market



Tomas Calleja Mediano

Macro trend perspective on EU



Markus Meukel

Expert for eSIM and future business models

Source: Team analysis

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# TODAY, THE US TELCO MARKET IS MORE ATTRACTIVE THAN EUROPEAN PORTFOLIO MARKETS

US

VS.

DTEU Portfolio (excl. Germany and UK)

1 More favorable macroeconomic environment	~42 TEUR GDP/capita 2015, growing 3% p.a. 2012-20	~17 TEUR GDP/capita 2015, growing 3% p.a. 2012-20
2 Larger market with more attractive growth prospects	<ul style="list-style-type: none"> <li>~397bn USD telco service revenues<sup>1</sup> in 2015 that are stagnating (i.e., ~zero growth till 2020)</li> <li>~197bn USD video revenues<sup>2</sup> in 2015, with 3.1% growth p.a. till 2012-2020</li> <li>3.3% telco and video spend as percentage of GDP<sup>3</sup> 2015, declining -3% p.a. 2012-20</li> </ul>	<ul style="list-style-type: none"> <li>~37bn EUR telco service revenues<sup>1</sup> 2015, declining -3% p.a. 2012-20</li> <li>~9,3bn USD video revenues<sup>2</sup> in 2015, with 3.0% growth p.a. till 2012-2020</li> <li>2.1% telco and video spend as percentage of GDP<sup>3</sup> 2015, declining -5% p.a. 2012-20</li> </ul>
3 Market with limited competition and different structure	<ul style="list-style-type: none"> <li>Limited fixed broadband overbuild</li> <li>No nationwide fixed broadband players</li> <li>Small role of MVNOs</li> </ul>	<ul style="list-style-type: none"> <li>Fixed broadband overbuild more common</li> <li>Typically strong nationwide incumbents</li> <li>Significant MVNO market shares in Western Europe</li> </ul>
4 More friendly regulatory environment fostering investments <sup>4</sup>	<ul style="list-style-type: none"> <li>Regulator with infrastructure focus</li> <li>Reliable and investment friendly spectrum awards</li> <li>Stable political environment</li> </ul>	<ul style="list-style-type: none"> <li>Regulator with competition and consumer welfare focus</li> <li>Unreliable and CAPEX harming spectrum awards</li> <li>Political uncertainty in certain CEE markets</li> </ul>
5 Customers show higher spend for telco services	<ul style="list-style-type: none"> <li>36 EUR mobile market ARPU<sup>5</sup> Q2 2015</li> <li>71 EUR fixed market ARPU<sup>5</sup> Q2 2015</li> </ul>	<ul style="list-style-type: none"> <li>13 EUR weighted mobile market ARPU<sup>5</sup> Q2 2015</li> <li>31 EUR weighted fixed market ARPU<sup>5</sup> Q2 2015</li> </ul>

<sup>1</sup> Fixed and mobile service revenues      <sup>2</sup> Video (excl. HR, SK, MK, ME, AL for DTEU) includes PayTV, physical home video, OTT and TV advertising      <sup>3</sup> Revenues (Video, wireline, mobile)/GDP      <sup>4</sup> Impact of Net Neutrality policies on investment friendliness yet to be seen      <sup>5</sup> Compared to currently ~17k USD net adjusted disposable household income for selected DTEU portfolio countries (average for HR, CZ, SK) vs. ~41k USD in US households

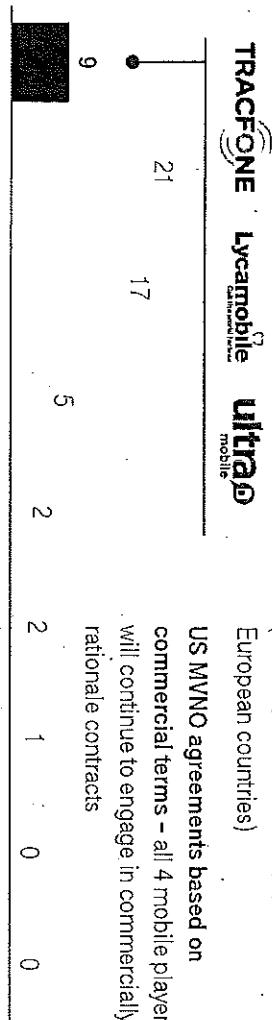
*Details in appendix*

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# 1 NEW MOBILE ENTRANTS WILL NOT BECOME RELEVANT PLAYERS

## Trend factuals – excerpt

MVNO subscriber market share  
9/6, 2014



MVNOs currently with 9% market share<sup>1</sup> in the US telco market (vs. 15%+ in selected Western European countries)

US MVNO agreements based on commercial terms – all 4 mobile players will continue to engage in commercially rationale contracts

## “So What” for TMUS

Trend can be disregarded to define a winning position for TMUS

- Continuation of status quo bears no disruption potential for TMUS
- Emergence of MVNO entrants unlikely – however, if they would emerge it bears a disruption potential for TMUS

### Disruption impact for TMUS

High  
Low

High  
Low

1

Likelihood  
Low  
High

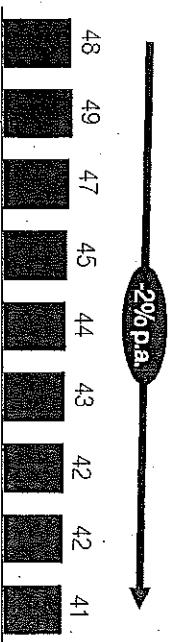
- Regulation won't support access seeker business models as the FCC values infrastructure investments over competition.**
  - Expert interview
- High degree of speculation in press regarding cable MVNOs – but they will generally not be a force**
  - Expert interview
- European regulation likely to continue favorable regulation for access seeker business models**
  - Expert interview

<sup>1</sup> Google Fi just starting  
Source: Team Analysis, Expert interviews, Ovum

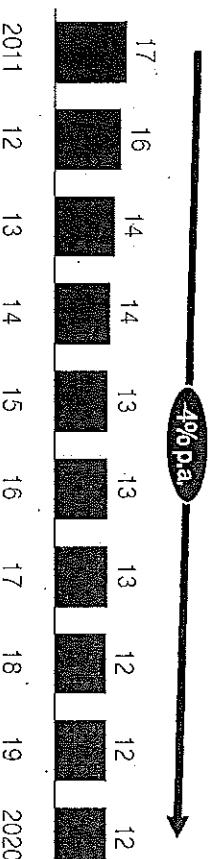
# 9 US ARPU\$ WILL REMAIN ON MUCH HIGHER LEVEL THAN IN EU PORTFOLIO COUNTRIES

## Trend factuals – excerpt

US Mobile service ARPU\$,  
USD/month



DTEU portfolio mobile service ARPU\$,  
EUR/month



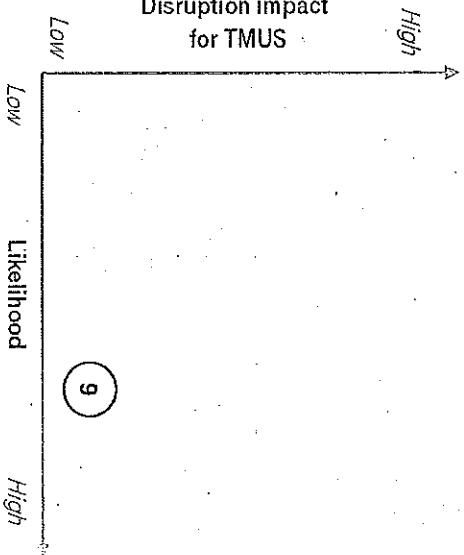
**T**... Future mobile ARPU\$ expected to stabilize at lower levels in DTEU portfolio countries

<sup>1</sup> Expert opinion that US consumers care more about bundles and features vs. low price offers  
<sup>2</sup> Source: Team Analysis

## “So What” for TMUS

- Trend can be disregarded to define a winning position for TMUS
- Continuation of status quo bears no disruption potential for TMUS – US continues to be relatively more attractive than DTEU portfolio markets

Disruption impact for TMUS



# 10 MOBILE/MOBILE AND FMC CONSOLIDATION COULD CHANGE TELCO MARKET STRUCTURE

## Trend factuals – excerpt

- Mobile
  - TMUS + Sprint merger regarded as natural strategic move by all experts
  - However, regulator unlikely to allow emergence of 3-player mobile market
  - Antitrust policy changing slowly as no direct political influence possible, any changes only likely in mid/long-term via changes in key personnel
  - Lobbying / media campaigns could help to influence decision
  - Consolidation also unlikely under new Democratic administration and only slight improvements vs. today expected under Republican government
  - Dish's massive spectrum could lead to mid-term spectrum deal
- Fixed
  - Cable players under limited consolidation pressure, since they are winning broadband market share from traditional telcos
  - No FMC consolidation focus due to limited geographic footprint of individual cable players (no country wide FMC possible) and given prohibition of previous cable mergers
  - Many experts eventually expect a Verizon Comcast merger
  - However, "ego issue" of several large market players hinders consolidation (e.g. VZ, Comcast do not want to give up control, Cox Comm, "not for sale")
- Video/ content
  - Further consolidation of video services seen as likely (e.g. content player + telco), long term success of integrated business models needs to be proven
  - Telcos will not end up as content owners and aggregation role difficult due to very fragmented content distribution rights

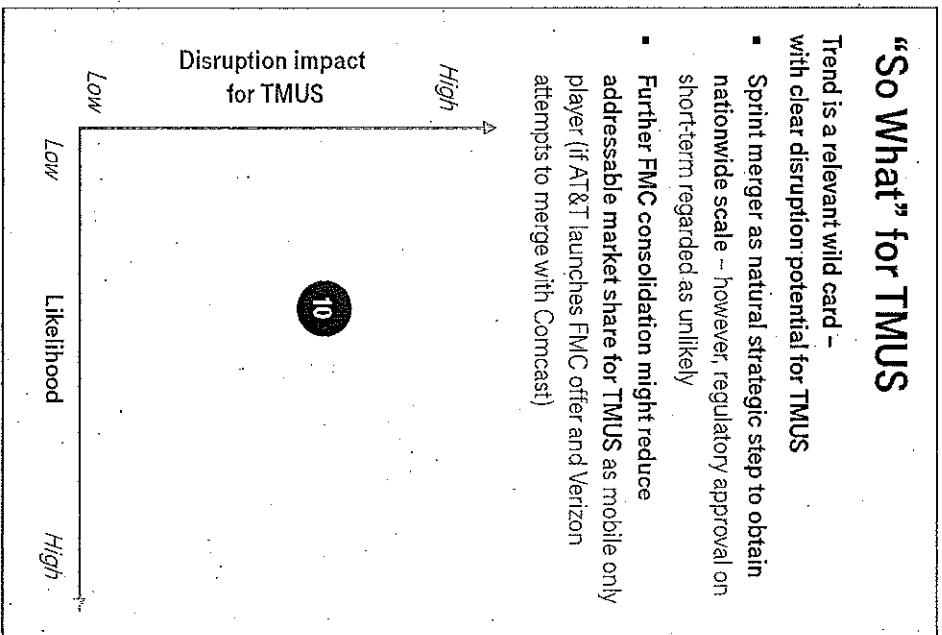
Source: Team analysis, reports, expert interviews

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## "So What" for TMUS

Trend is a relevant wild card – with clear disruption potential for TMUS

- Sprint merger as natural strategic step to obtain nationwide scale – however, regulatory approval on short-term regarded as unlikely
- Further FMC consolidation might reduce addressable market share for TMUS as mobile only player (if AT&T launches FMC offer and Verizon attempts to merge with Comcast)



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# FURTHER LONG-TAIL CONSOLIDATION TO BE EXPECTED IN THE FIXED NET MARKET

## Trend factuals – excerpt

Manifold recent consolidation (attempts) among large cablecos<sup>1</sup>

COMCAST<sup>#2</sup> Merger between Comcast (#1) and TWC (#2) prohibited

TIME WARNER CABLE<sup>#2</sup>

Charter Comm. (#3) bought TWC (#2) and Bright House (#6)

Altice<sup>#5</sup> and Suddenlink (#9)

Many cable providers are nationwide subscale: 93% of the cable providers operate in one state only and only 20 providers cover more than >1mn people

*Everything below Comcast is in consolidation mode*

- D. Goei, (CEO, Altice)

## “So What” for TMUS

Trend can be disregarded to define a winning position for TMUS

Continuation of status quo outside of Mobile market bears no disruption potential for TMUS

Disruption impact for TMUS

High

Low

Low

Likelihood

High

11

<sup>1</sup> Ranking based on population covered in 2014  
Source: Team Analysis, broadbandmap.com

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# REGULATORY ENVIRONMENT REMAINS STABLE IN US AND EUROPE

## Trend expectations – excerpt

	US	EU
Wholesale	<ul style="list-style-type: none"> <li>Still no mobile wholesale obligation, thus no new disruptive market entries (MVNOs)</li> <li>No fixed wholesale regulation expected, thus no new market entries by access seekers (e.g. ULL)</li> </ul>	<ul style="list-style-type: none"> <li>MVNO obligations will likely remain</li> <li>Fixed access regulation might become more lax but significant improvements yet to be seen</li> </ul>
Consolidation	<ul style="list-style-type: none"> <li>4-&gt;3 merger not expected in the short term</li> <li>Major cable consolidation rather unlikely given TWC-Comcast prohibition</li> <li>Cross-sector consolidation will likely get approval</li> </ul>	<ul style="list-style-type: none"> <li>4 player mobile markets will remain key objective of EU competition policy</li> <li>No change regarding approach towards FMCG consolidation</li> </ul>
Services regulation	<ul style="list-style-type: none"> <li>Services regulation will remain rather lax, but potential increases in regulatory tendencies e.g. in consumer protection, net neutrality</li> </ul>	<ul style="list-style-type: none"> <li>Current high level of regulatory intervention on telcos, application to OTTs seen as likely in the future</li> </ul>
Political environment	<ul style="list-style-type: none"> <li>Overall environment is stable, slight improvements possible with new Republican administration</li> </ul>	<ul style="list-style-type: none"> <li>Overall environment mixed<sup>1</sup>; Regulation expected to remain more intrusive than US</li> </ul>

*See trend 10 for further details*

Sources: Team Analysis; 1) currently difficult to assess how far investment environment can be improved.

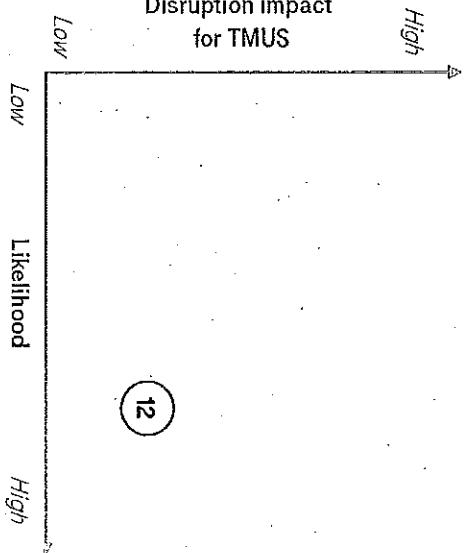
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## “So What” for TMUS

Stable trend, thus no disruption expected for TMUS – can be disregarded for archetype building

- Continuation of status quo bears no disruption potential for TMUS
- Monitoring of situation and active lobbying for mobile-mobile consolidation

### Disruption impact for TMUS



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# WRAP UP – US CONTINUES TO BE AN ATTRACTIVE MARKET DESPITE POTENTIAL WILD CARD TRENDS

<b>1</b> 	<b>US continues to have more favorable macroeconomic environment vs. DTEU portfolio countries</b>
<b>2</b> 	<b>US continues to be the larger market with relatively more attractive growth vs. DTEU portfolio countries</b>
<b>3</b> 	<b>US continues to have less competitive market structure (e.g., no access seeker business model) vs. DTEU portfolio countries</b>
<b>4</b> 	<b>US continues to have more operator friendly regulatory environment (i.e., to foster infrastructure invests<sup>1</sup>) vs. DTEU portfolio countries</b>
<b>5</b> 	<b>US customers will continue to have higher spend for telco services (e.g., US mobile ARPU will remain ~ 22 EUR higher than in DTEU portfolio countries)</b>

<sup>1</sup> Impact of Net Neutrality policies on investment friendliness yet to be seen. EU might slightly improve.  
Source: DT&G, Team Analysis

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# CONTENTS

## Workshop I

### Workshop II

#### ▪ Workshop I recap

- Future competitive dynamics
- So what for TMUS to define a winning position
- Wrap up and next steps



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## US MARKET IS AND WILL CONTINUE TO BE MORE ATTRACTIVE THAN DTEU PORTFOLIO MARKETS



US market structure is and will be different vs. EU<sup>1</sup>



Competition is and will remain lower than in EU policy expected



No major shifts remain significantly higher than in EU



US ARPUs will not change the picture



Even disruptive market trends will not change the picture

- No nationwide fixed net players
- Less consumer choice for fixed BB/TV
- US regulation more investment friendly<sup>2</sup> – EU might slightly improve
- Though no increase expected
- ... and also CAPEX levels significantly higher
- But, there won't be a full "reversion to the mean"
- In US, large domestic players key beneficiaries

*Details in appendix*

<sup>1</sup> EU refers to DTEU portfolio countries  
Source: DTAG, Team Analysis

<sup>2</sup> Impact of Net Neutrality policies on investment friendliness yet to be seen

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# CONTENTS



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## Workshop I

### Workshop II

- Workshop I recap
- Future competitive dynamics
- So what for TMUS to define a winning position
- Wrap up and next steps



# PHASE II: SPRINT AND COMCAST MOST LIKELY MERGER

## FOR DISCUSSION

		Deal likelihood
Potential TMUS end-games	Key strategic rationale(s)	High
① 4>3 mobile Sprint merger	<ul style="list-style-type: none"> <li>Sprint on verge of bankruptcy (would love to merge)</li> <li>Clear scale gain and synergy potential for TMUS to own ~30% of mobile market (at scale with AT&amp;T, VZ)</li> </ul>	<ul style="list-style-type: none"> <li>Strategic or regulatory barrier(s)</li> <li>Likelihood of approval will not increase substantially in case of bankruptcy (Analysts: even with Republican administration only &lt;50% probability<sup>1</sup>)</li> </ul>
② (Sub-sequent) cable merger	<ul style="list-style-type: none"> <li>Move into mobile might be only natural option for Comcast to grow, as preferred Comcast moves (i.e., wireless and content) are unlikely to get regulatory approval</li> <li>Bring video content onto mobile (i.e., linear/OTT)</li> <li>Potential move into mobile as adjacency play (e.g., eyeball increase, mobile video, cost synergies)</li> </ul>	<ul style="list-style-type: none"> <li>Potential burdensome CFIUS process?</li> <li>Likely no significant regulatory barriers<sup>2</sup></li> <li>If move into content gets regulatory approval, it will be more likely than move into mobile (see appendix)</li> <li>No nationwide fixed net – limited FMC potential</li> <li>Less likely than Comcast due to lower TMUS footprint overbuild (FMC ability) and weaker financials</li> </ul>
③ Alternate mergers	<ul style="list-style-type: none"> <li>Creation of one North American service market and synergy potentials with existing verticals</li> <li>Return to execution of core business model vs. current MVNO play (TracFone)</li> <li>Move into mobile could be an opportunistic adjacency play for Altice</li> </ul>	<ul style="list-style-type: none"> <li>Likely no regulatory barriers</li> <li>Potentially cheaper and better acquisition candidates around the globe</li> <li>Altice currently small cable player in US (&lt;4mn TV and broadband subs)</li> <li>Greater priority for Altice to acquire wireline</li> <li>Sprint better fit for Altice's lean turnaround playbook</li> <li>2018+ sustainability questionable (to be investigated)</li> </ul>
④ Organic #3 in mobile	<ul style="list-style-type: none"> <li>No merger optionality can be exercised (due to barriers)</li> </ul>	
Most merger optionality with low deal likelihood – details in appendix		

<sup>1</sup> Lobbying campaign needed

<sup>2</sup> Unless Comcast becomes WiFi/MVNO entrant; FCC likely to raise concerns regarding vertical integration (i.e., mobile video) - moreover, FMC M&A untested in US

Source: Team Analysis, Expert Interviews



# PHASE I: TMUS PLAYBOOK TILL 2018

Action path till eoy 2017



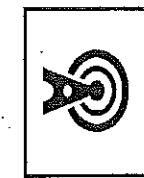
Continue  
Uncarrier  
growth



Secure  
sufficient  
spectrum



Pave way for  
market  
consolidation



Secure  
sufficient  
spectrum

- Continue Uncarrier growth in B2C according to plan<sup>1</sup> or above
- Explore further growth adjacencies (e.g., B2B, IoT, M2M, mobile video)
- Bid in next incentive auction
- Define strategy towards Dish spectrum (i.e., what is the right acquisition price?) – Hypothesis: Dish currently a distraction – wait until their negotiation power is weakened
- Continue network densification as needed

- Continue value strategy to keep 4>3 merger optionality
- Strengthen lobbying for 4>3 merger (i.e., win “right” people in D.C., media campaign)
- Don’t overplay offending consolidation stakeholders (FCC, DOJ, AT&T, VZ, merger partners and Unions will be important in future deal-making)
- Show openness to consolidate
  - Signal TMUS interest in Sprint and position Sprint as difficult asset for cablecos<sup>2</sup>
  - Signal TMUS interest in (subsequent<sup>3</sup>) cable merger and advertise superiority over VZ
- Invest in assets and activities that complement a cableco merger (i.e., large and valuable customer base, network strength, ad and mobile video capabilities)
- Consider MVNO cableco deal to establish long-term partnerships?



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<sup>1</sup> Customer, revenue, EBITDA, FCF and EV growth  
Source: Team Analysis, Expert interviews

<sup>2</sup> Especially for Comcast, Charter Group and Altice

<sup>3</sup> After TMUS + Sprint merger if feasible

DO NOT DISCUSSION  
LAWYER-CLIENT  
ATTORNEY-CLIENT  
PRIVILEGED

3

# US VS. DTEU AND DIFFERENT MARKET STRUCTURE

NOT EXHAUSTIVE

US

■ Area with at least 2 broadband providers  
■ Area with 1 or no broadband provider

VS.

DTEU portfolio



## Fixed

- No nationwide broadband players – high geographical fragmentation
- Limited FMC ability
- Limited overbuild for broadband
- Cable key broadband technology
- Strong nationwide incumbent(s) typical
- FMC as typical value proposition
- Broadband overbuilt more common
- No dominating technology for broadband

## Mobile

- 2 main players (i.e., from 4 nationwide operators 2 are nationwide subscale)
- MVNOs not significant in terms of market share
- Incumbent and at least 2 further operators common
- MVNOs with significant market shares in Western Europe

<sup>1</sup> According to the National Broadband Map defined as a two-way data transmission with advertised speeds of at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream  
Source: DTAG Team Analysis, Broadband.gov



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## 4 US MARKET WITH MORE FRIENDLY REGULATORY AND POLITICAL ENVIRONMENT (1/2)

EXCERPT



US regulation aims at fostering investment



*Additional focus on consumer welfare and competition also observable'*

Overall policy objectives



Access seeker Business

- No regulated wholesale access
- No obligation to offer fixed wholesale access
- No obligation to offer MVNO access – MVNOs on commercial terms only



Reliable and investment friendly spectrum awards

Spectrum awards

- Transparent and reliable auction designs
- Spectrum ownership enables long-term invest perspective
- Spectrum awarded regionally
- Better secondary market for spectrum
- Significant spectrum allocation for mobile (e.g. 600MHz auction in 2016)



EU regulation aims at enhancing competition and securing consumer welfare

*Kroes announcement of 2012, recommendation on costing methodologies and non-discrimination, and comments by Oettinger show willingness to improve invest climate*

Strict regulated wholesale access obligations enable and protect access seeker business models (e.g., ULL based like 1&1, MVNO like Drillisch, etc.)

Unreliable and investment harming spectrum awards

- Intransparent and non-harmonized auction designs maximizing state proceeds
- No spectrum ownership - limited license durations create investment uncertainties and "extortion potential" in future auctions



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<sup>1</sup> US Telco industry complaints about fines above 100mUSD  
Source: DTAG Team Analysis

4

## US MARKET WITH MORE FRIENDLY REGULATORY AND POLITICAL ENVIRONMENT (2/2)

EXCERPT



- Lax consumer protection, net neutrality allows zero-rating
- Very relaxed consumer protection and data privacy policy
- Net Neutrality covers fixed and mobile operators (excl. B2B)
  - Allows for zero-rating<sup>1</sup>
  - "Specialized services" possible and could be prioritized<sup>2</sup>
- Policy driven by case law ("wait-and-see intervention")



### Large scale in-market consolidation currently not allowed

- Little support for 4>3 mobile consolidation
- Large scale cable consolidation was put on hold
- FMC/Video consolidation likely to receive clearance
- MVNO competition not considered (e.g. TracFone)

### Overall rather stable political environment

- No sudden regulatory measures for political purposes or to close budget gaps (exception: FCC's net neutrality decision)
- Changes in political powers do not lead to major alterations
- Enables long-term investment perspectives



### High political uncertainty in some CEE

- Special taxes, excessive fees etc. (e.g. HU, ROM)
- Nationalistic attitudes and critical towards foreign ownership
- Investment environment largely dependent on political parties in power
- Compliance issues in several CEE countries



- Strict consumer protection, net neutrality allows zero-rating
- Very strict consumer protection and data privacy policy
- Net Neutrality requirements for all operators (mobile, fixed)
  - Allows for zero-rating<sup>1</sup>
  - "Specialized services" possible and could be prioritized<sup>2</sup>
- Policy driven by coordinat. approach amongst regulators



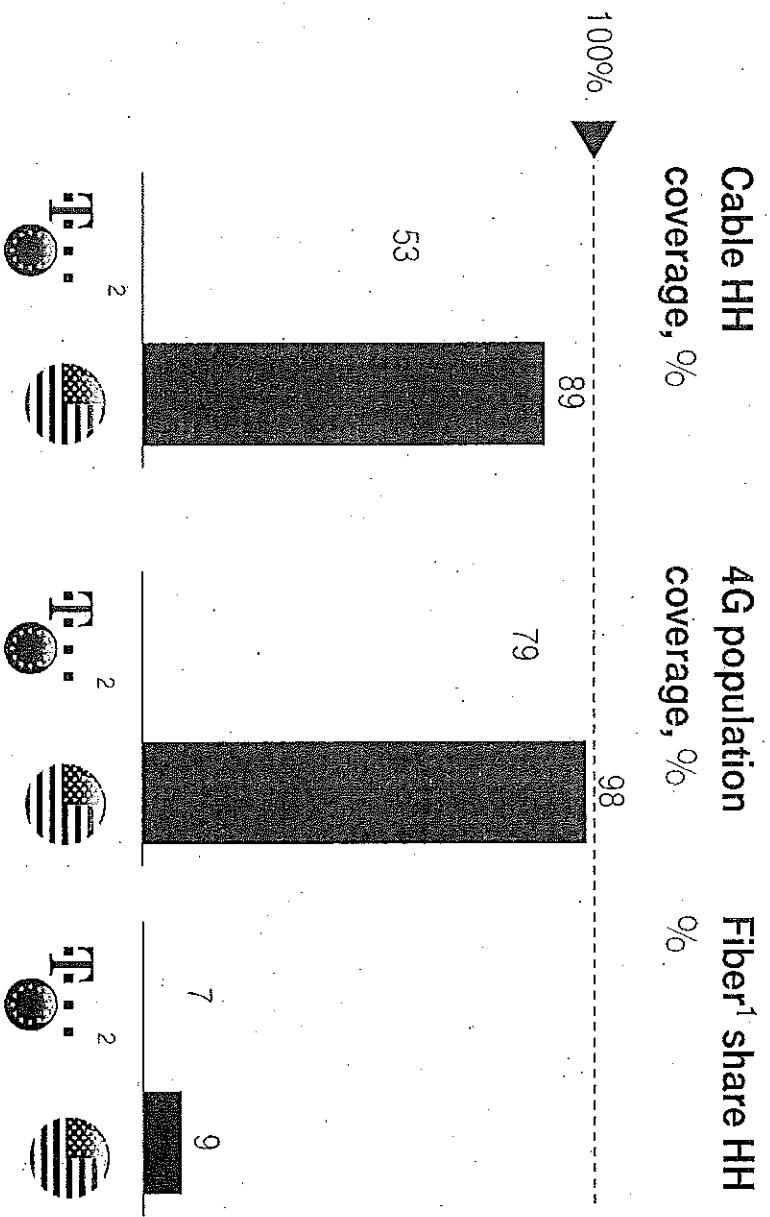
### Significant further in-market consolidation questionable

- 4>3 mobile consolidation becoming more difficult, unless structural remedies can be offered
- FMC consolidation so far approved with no (GTS) / light remedies (Belgium)
- Commission with intense focus on keeping up competition

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<sup>1</sup> Zero-rating as long as non-discrimination of other similar services, e.g. video, however no throttling or prioritization of services allowed, e.g. video vs. rest of traffic  
<sup>2</sup> Special services are considered as not being regular  
 Internet traffic (such as high-quality VoIP, IPTV) and can be treated differently, definition of "specialized services" not yet finalized in both regions  
 Source: DT&G, Team Analysis

## 4 REGULATORY INCENTIVES FORCED A BETTER INFRASTRUCTURE IN US THAN IN DTEU COUNTRIES



<sup>1</sup> 2014 share of broadband subs with FTTB/H technology as of total number of broadband subs

<sup>2</sup> Household population based weighted average for DTEU footprint countries without Albania, Macedonia and Montenegro

Source: Digital Agenda – European Union, broadbandmap.gov, press, AT&T, TeleGeography, Team analysis

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# 5 US CUSTOMERS SHOW HIGHER SPEND FOR TELCO SERVICES

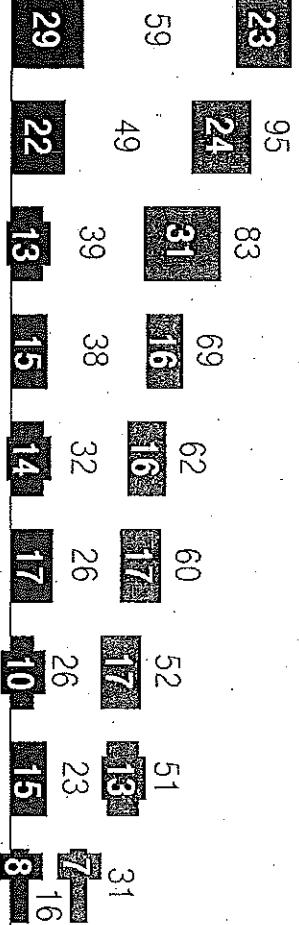
■ Pay-TV<sup>1</sup>  
■ Fixed<sup>2</sup>  
■ Mobile<sup>3</sup>

## Market ARPUs 2014

USD/month

226

85



» US mobile ARPUs on average around 3x higher than in DTEU footprint countries

US fixed ARPUs on average more than 2.5x higher than in DTEU footprint countries

US Pay-TV ARPUs on average more than 4x higher than in DTEU footprint countries

<sup>1</sup> Includes subscription and on-demand revenue via cable, satellite, IPTV and DTT (excl. TV advertising) <sup>2</sup> Based on Mason data <sup>3</sup> Based on DTAG internal estimates  
Source: DTAG, Team Analysis

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# APPENDIX

## Workshop I

- Current DTAG position in US vs. European portfolio countries
- Today's market attractiveness of US vs. European portfolio countries
- Key trends shaping the future of the US telco market

## Workshop II

- Workshop I recap
- Future competitive dynamics

- **So what for TMUS to define a winning position**

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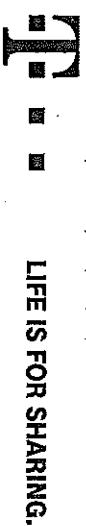
## 1

TMUS + SPRINT MERGER AS PREFERRED MOVE,  
BUT REGULATORY APPROVAL IS DIFFICULT

KEY PARAMETERS AT A GLANCE

Sprint

Deep dive to follow



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	"So What" for TMUS	
<b>a Strategic rationale?</b>	<ul style="list-style-type: none"> <li>Sprint on verge of bankruptcy (would love to merge)</li> <li>Clear scale gain and synergy potential for TMUS to own ~30% of mobile market (at scale with AT&amp;T, VZ)</li> </ul>	Continue value strategy (to keep optionality for 4>3 merger)
<b>b Combined network effects?</b>	<ul style="list-style-type: none"> <li>188 MHz additional spectrum – 14MHz in the most attractive low band segment</li> <li>Complimentary coverage in select US regions</li> </ul>	<ul style="list-style-type: none"> <li>Do not overplay offending consolidation stakeholders<sup>1</sup></li> <li>Do not follow Sprint in price wars or irrational MVNO deals (sustain ARPU)</li> </ul>
<b>c Regulatory barriers?</b>	<ul style="list-style-type: none"> <li>Regulator will unlikely approve 4&gt;3 mobile merger (even with Republican administration)</li> <li>Even in case of bankruptcy regulatory approval might be unlikely (Analysts: also under Republican administration potentially only &lt;50% probability for that)</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen lobbying activities for 4&gt;3 merger with the "right" people in Washington</li> </ul>
<b>d Key Do's and Don'ts to realize TMUS + Sprint merger</b>	<ul style="list-style-type: none"> <li>Strengthen lobbying activities for 4&gt;3 merger with the "right" people in Washington</li> <li>Position Sprint as difficult merger asset towards AT&amp;T, VZ, and cablecos</li> </ul>	Continue value strategy to keep optionality for 4>3 merger
<b>e Sprint is a target to many</b>	<ul style="list-style-type: none"> <li>PRO: Market structure calls for consolidation, 4&gt;3 in the interest of all mobile players</li> <li>CON: Regulatory approval for 4&gt;3 merger difficult</li> </ul>	Avoid that anyone else gets them (signal Sprint as difficult target to cablecos)
<b>f Deal likelihood</b>	<ul style="list-style-type: none"> <li>Low</li> <li>High</li> </ul>	

<sup>1</sup> FCC, DOJ, Unions, AT&T, VZ  
Source: Team Analysis, Analyst reports, Capital IQ

1C

# REGULATORY APPROVAL AS KEY BARRIER FOR TMUS + SPRINT MERGER

Sprint

Near term regulatory approval for 4>3 mobile merger seems highly unlikely ....

... however, various levers for TMUS to lobby for 4>3 mobile-merger exist

It's going to be hard for someone to make a persuasive case that reducing 4 firms to 3 is actually going to improve competition for the benefit of American consumers.

- William Baer, DOJ

We must protect competition where it exists. Our goal should be to ask how competition can best serve the public.

- Tom Wheeler, FCC

Were [the deal] somehow approved, there would be numerous conditions attached, such as the divestiture of spectrum/other assets and imposition of a wholesale mandate that would bleed off a portion of the financial benefits.

- UBS

Source: Press Analysis, DTAG, Team analysis

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# EVEN IN CASE OF SPRINT BANKRUPTCY - FCC MAY NOT ALLOW FOR 4>3 MERGER

Sprint

Current Sprint situation at a glance	Outlook for the next ~12 months	2 potential outcomes by eyo 2016
Financial distress	Continued support from Softbank expected	Outcome 1 - Sprint turnaround fails and bankruptcy is unavoidable
Low EBIT margins (~6% in 2014, ~2% in 2015)	...to see whether turnaround initiative shows measurable success	Likelihood of approval will not increase substantially in case of bankruptcy <sup>1</sup> (Analysts: even with Republican administration only <50% probability)
~4.5bn USD cash burn rate expected for 2015	...to wait for presidential elections (even though 4>3 approval remains unlikely under Republican administration, it is worthwhile a wait)	If allowed - mobile players most likely purchasers (as operational synergies are larger for MNOs vs. cablecos)
Debt of 2.5bn matures in 12/2016 (currently no Source for refinancing)	Turnaround initiative started	Outcome 2 - Turnaround shows success and Softbank continues financing
2.5bn USD cost-cutting program started in Q2/2015	Aggressive pricing (i.e., unlimited plan for 60 vs. 80 USD for TMUS)	

<sup>1</sup>The failing firm defense is rarely invoked in court or before agencies. When it is, it is perceived as rarely successful  
Source: Analyst reports, Team analysis.

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2

# PREPARE FOR COMCAST BUYING TMUS AS 2018+ OPTIONALITY

KEY PARAMETERS AT A GLANCE

COMCAST  
Deep dive to follow



## a Strategic rationale for Comcast?

- Move into mobile might be only natural option to grow as preferred moves (i.e., wireline and content) are unlikely to get regulatory approval
- Several strategic advantages
  - Increase eyeballs
  - Bring video content onto mobile (i.e., linear/OTT)
  - FMC ability in select areas (but w/o massive discounts; i.e., broadband & mobile bundle for cord cutters)
  - Realize cost and network synergies through economies of scale
  - Fits with WiFi first approach



## b Combined network effects?

- ~90mn people with Comcast access in the states where TMUS has >70% coverage<sup>1</sup>
- ~59mn TMUS customers vs. ~22mn Comcast TV & ~23mn Broadband subscribers



## c Regulatory barriers?

- Likely no significant regulatory barriers<sup>2</sup>



## d Key Do's and Don'ts to dress TMUS for optionality?

- Bid for spectrum & continue densification
- Increase customer base (i.e., especially younger, video affine demographics)
- Signal Sprint as difficult asset for Comcast and signal interest to merge with Comcast subsequent to potential TMUS + Sprint merger
- Don't enter into fixed (i.e., wholebuy, FMS) without thinking through what it means for Comcast merger



## e So What" for TMUS

Preferred merger – ideally after Sprint merger, else stand-alone

Be attractive bride by investing in network strength and growth of subscriber base

Avoid Comcast + Sprint or VZ merger (signal Sprint as difficult target)

Signal merger interest with Comcast (i.e., à la "You can get a merged TMUS + Sprint")

PRO: Strategic rationale (see section a)  
CON: No wireless experience, only small growth in wireless, limited FMC ability, likely to explore alternate adjacencies if at all feasible (i.e., wireline and content)



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<sup>1</sup> Percent of the population with T-Mobile wireless access in that geography  
<sup>2</sup> FCC likely to raise concerns if Comcast becomes WiFi/MNO entrant and regarding vertical integration (i.e., mobile video)  
 Source: Team Analysis, Analyst reports, Capital IQ, BroadbandNow.com

## 2

PREPARE FOR CHARTER GROUP MERGER  
AS 2018+ OPTIONALITY

## KEY PARAMETERS AT A GLANCE

Charter  
Time  
Warner  
bright house

Deep dive to follow

## a Strategic rationale for Charter Group?

- Potential move into mobile as adjacency play
- Several strategic advantages
- Increase eyeballs
- Bring video content onto mobile (i.e., video affine demographics)
- FMC ability in select areas (but w/o massive discounts, i.e., broadband & mobile bundle for cord cutters)
- Realize cost and network synergies through economies of scale
- Fits with WiFi first approach

## d Key Do's and Don'ts to dress TMUS for optionality

- ✓ Increase customer base (i.e., especially younger, video affine demographics)
- ✓ Bid for spectrum & continue densification
- ✓ Signal Sprint as difficult asset for Charter Group and show interest in (subsequent) Charter deal
- ✗ Don't enter into fixed (i.e., wholebuy, FMS) without thinking through what it means for Charter merger

## e Alternate brides for Charter group?

- Sprint: If still existent and significantly stabilized
- ✓ Pending FCC approval (i.e., largest fixed/mobile player, vertical integration)



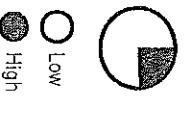
## b Combined network effects?

- ~80mn people with Charter Group access in the states where TMUS has a >70% coverage<sup>1</sup>
- ~59mn TMUS customers vs. ~17mn Charter Group TV & ~20mn Broadband subscribers



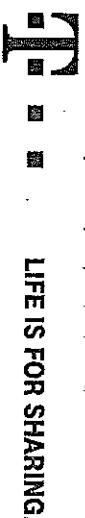
## c Regulatory barriers?

- Likely no significant regulatory barriers<sup>2</sup>



## f Deal likelihood?

- PRO: Strategic rationale (see section a)
- CON: Occupied with post-merger efforts for next 1-3 years, financially torn, higher synergies with fixed players (i.e., CenturyLink, Frontier), no wireless experience, limited FMC ability



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<sup>1</sup> Percent of the population with T-Mobile wireless access in that geography  
<sup>2</sup> FCC likely to raise concerns if Charter Group becomes WiFi/MNO entrant and regarding vertical integration (i.e., mobile video)

# 2D STRONG NETWORK TOGETHER WITH SUB + FCF

## GROWTH KEY TO DRESS FOR CABLECOS

CONFIDENTIAL DISCUSSION  
**COMCAST**  
 Charter  Time Warner  
 brighthouse  Cable

### Do's

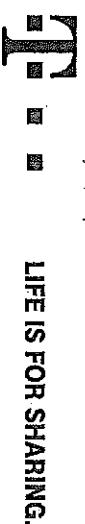
- ✓ Invest in a strong network (i.e., acquire spectrum, increase densification, engage in WiFi offloading)
- ✓ Increase customer base – focus especially on the younger, video affine demographics that consume significant amounts of mobile video
- ✓ Further strengthen P&L and balance sheet – to allow TMUS enter into merger negotiations from a position of strength
- ✓ Consider creation of mobile-only video content (i.e. short form) that could be integrated in cablecos OTT offering
- ✓ Safeguard and further expand “sexy and innovative” T-Mobile image
- ✓ Try to establish/acquire attractive mobile ad-technology that is feasible for both mobile and cable players

### VS

### Don'ts

- ✗ Don't decrease prices and ARPU levels too much for the sake of customer growth / as reaction to Sprint
- ✗ Don't experiment with offers that could increase churn of existing customer base
- ✗ Don't duplicate “innovative capabilities” that are already present at cablecos but lacking at TMUS
- ✗ Don't enter the wireline domain<sup>1</sup>, i.e., own build-out, commercial whole-buy, FMS – might make cable moves more difficult and a financial benefit unlikely

<sup>1</sup> Without having a long-term strategy that includes a consolidation plan  
 Source: Team Analysis, Expert Interviews



## 3

## PREPARE FOR AMERICA MOVIL MERGER

america  
móvil

## KEY PARAMETERS AT A GLANCE

		“So What” for TMUS
 a Strategic rationale for America Movil?	<ul style="list-style-type: none"> <li>▪ Become full-fledged US MVNO (execution of AM's core business model)</li> <li>▪ Several strategic advantages <ul style="list-style-type: none"> <li>- Increased eyeballs (&gt;83mn mobile subs)</li> <li>- Creation of one North American mobile service market (US, Mexico)</li> <li>- Realization of cost synergies through economies of scale and MVNO-&gt;MVNO transition</li> </ul> </li> </ul>	
 b Combined network effects?	<ul style="list-style-type: none"> <li>▪ 25.7mn mobile subscribers in US via MVNO TracFone</li> <li>▪ Merged company could have &gt;100mn mobile subscribers by 2019<sup>1</sup></li> </ul>	
 c Regulatory barriers?	<ul style="list-style-type: none"> <li>▪ No regulatory barriers expected (i.e., merged company would be smaller than AT&amp;T or VZ)</li> </ul>	
 d Key Do's and Don'ts to dress TMUS for optionality?	<ul style="list-style-type: none"> <li>○ Increase customer base</li> <li>○ Bid for spectrum &amp; continue densification</li> <li>○ Signal Sprint as difficult asset for AM</li> <li>○ Signal merger interest to AM</li> <li>○ Ensure that any potential MVNO deal is long-term beneficial to TMUS</li> <li>✖ Don't engage in price war: (sustain ARPU)</li> </ul>	<ul style="list-style-type: none"> <li>Potential standalone exit option – if Comcast merger not feasible</li> <li>Avoid AM + Sprint merger (signal Sprint as difficult target)</li> </ul>
 e Alternate brides for AM?	<ul style="list-style-type: none"> <li>▪ If still existent and significantly stabilized</li> </ul>	<ul style="list-style-type: none"> <li>Signal merger interest with AM (ideally subsequent to Sprint merger)</li> </ul>
 f Deal likelihood?	<ul style="list-style-type: none"> <li>○ Low</li> <li>● High</li> </ul>	<ul style="list-style-type: none"> <li>▪ PRO: Strategic rationale (see section a)</li> <li>▪ CON: Potentially better investment opportunities in other core markets (i.e., LATAM)</li> </ul>
		Be an attractive bride (enhance network and grow subs)

<sup>1</sup> TMUS subscriber base forecasted to be ~76mn by 2019  
Source: Team Analysis, Analyst reports, Capital IQ, BroadbandNow.com



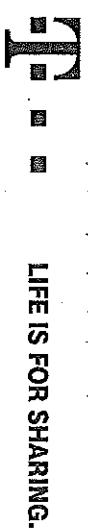
# 3 PREPARE FOR ALTICE MERGER AS 2018+

FOR DISCUSSION  
Altice

## KEY PARAMETERS AT A GLANCE

- a Strategic rationale for Altice?**
  - Move into mobile could be an opportunistic adjacency play for Altice (much like a PE player)
- b Combined network effects?**
  - ~16.9mn people with Altice access in the states where TMUS has a >70% coverage<sup>1</sup>
  - ~59mn TMUS customers vs. ~3.5mn Altice TV (of which about 2.5mn in NY) and ~4mn broadband subscribers
- c Regulatory barrier?**
  - No regulatory barriers expected (i.e., due to wireline vs. wireless presence)
- d Key Do's and Don'ts to dress TMUS for optionality**
  - Bid for spectrum & continue densification
  - Increase customer base
  - Signal Sprint turnaround as too challenging for Altice (given no wireless experience nor relevant synergies)
  - Ensure that any potential MVNO deal is long-term beneficial to TMUS
  - ✖ Don't engage in price war (sustain ARPPUs)
- e Potential alternate Altice targets**
  - Sprint
    - If still existent and stabilized
- f Deal likelihood?**
  - Low
    - UNLIKELY: Higher synergies with fixed players (i.e., Centurylink, Frontier), Sprint much better fit for their lean turnaround playbook
  - High

<sup>1</sup> Percent of the population with T-Mobile wireless access in that geography  
Source: Team Analysis, Analyst reports, Capital IQ, BroadbandNow.com



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## 5 DON'TS TO MAINTAIN 2018+ MERGER OPTIONS

**Don't enter into MVNO deal that could complicate consolidation**  
(Deals should increase TMUS value)



**Don't trigger a price war in the US market**  
(Stable ARPU's base drives attractiveness & valuation)

COMCAST



**Don't overplay offending consolidation stakeholders**  
(FCC, DOJ, AT&T, VZ, merger partners and Unions will be important in future deal-making)

Charter Time Warner Cable  
bright house  
america  
móvil  
altice



**Don't invest in asset heavy media**, i.e., content rights or production  
(Lack of scale for TMUS and unlikely return on capital)

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**Don't enter the wireline domain<sup>1</sup>**, i.e., own build-out, whole-buy, FMS  
(Might make cable moves more difficult + financial benefit unlikely)

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<sup>1</sup>Without having a long-term strategy that includes a consolidation plan.  
Source: Team Analysis

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Key partner  
Merger options

Sprint

DT-LIT-00018205



1 JCAPSTA1

2 UNITED STATES DISTRICT COURT  
3 SOUTHERN DISTRICT OF NEW YORK

4 STATE OF NEW YORK, *et al.*,

5 Plaintiffs,

New York, N.Y.

6 v.

7 19 Civ. 5434(VM)

8 DEUTSCHE TELEKOM AG, *et al.*,

9 Defendants.

10 December 10, 2019  
11 9:05 a.m.

12 Before:

13 HON. VICTOR MARRERO,

14 District Judge

15 APPEARANCES

16 MUNGER, TOLLES & OLSON LLP  
17 Attorneys for Plaintiffs State of California

18 BY: GLENN POMERANTZ  
19 KURUVILLA JOSEPH OLASA  
20 KYLE W. MACH

21 STATE OF CALIFORNIA  
22 Department of Justice  
23 Office of the Attorney General  
24 Attorneys for State of California  
25 BY: PAULA L. BLIZZARD

26 STATE OF NEW YORK  
27 Office of the Attorney General  
28 Attorneys for State of New York  
29 BY: ELINOR R. HOFFMANN  
30 BEAU W. BUFFIER

JCATSTA4

Langheim - Direct

1 BY MR. MACH:

2 Q. Now in early December 2015, DT also held a workshop with  
3 McKinsey in DT offices in Germany, right?

4 A. Yes.

5 Q. And DT regularly retains outside advisers, right?

6 A. We speak to a lot of industry sources, consignors,  
7 advisers, bankers, yes.8 Q. And DT relies on those outside advisers in the ordinary  
9 course of its business, correct?10 A. You listen to opinions and sometimes you agree and  
11 sometimes you disagree. You collect a lot of information on  
12 the topic.13 Q. And the outside advisers that you rely on include companies  
14 like Bayne (ph) and McKinsey, right?

15 A. Yes, all the strategic advisers and a lot of banks.

16 Q. And McKinsey was involved in organizing workshop in  
17 December 2015, right?

18 A. Yes.

19 Q. And DT was also involved in organizing the workshop?

20 A. Yes.

21 Q. And you were personally involved in organizing that as  
22 well, right?23 A. Giving guidance, asking the question that should have been  
24 tackled at the meeting, yes.

25 Q. Is that another way of saying that you set the agenda for

1 JCATSTA4

Langheim - Direct

1       Mr. Langheim, and Mr. Langheim setting the agenda, discussing  
2       the content that should go in it, and there it is, the next  
3       page. I don't think that's a McKinsey document.

4       A. First of all, these two gentlemens are gentlemens that do  
5       not work for me. They report to the head of strategy who  
6       reports to Tim Höttges and to not me.

7                    MR. MACH: Thank you. I didn't mean to misstate that.  
8       They work for DT.

9                    MR. PARKER: So they hired somebody at McKinsey to  
10       give them an opinion, give them some advice, and you have to  
11       have your own people talking to them to make sure they're  
12       giving you advice on something relevant. So then McKinsey  
13       comes out with its advice so he can take that into account in  
14       making decisions, but that doesn't make this our document. And  
15       they certainly could have taken the deposition or called the  
16       McKinsey folks and we wouldn't have this problem.

17                   THE COURT: Sustained.

18                   MR. MACH: Respectfully, your Honor, may I respond?

19                   THE COURT: You may.

20                   MR. MACH: So the courts have held that even if what  
21       counsel has argued is correct and it was created by McKinsey at  
22       the request of DT and was created with guidance and input as to  
23       what the document should say, that that makes the document  
24       qualify as a party admission. It's what the court held in *FTC*  
25       *v. Qualcomm*, which recognizes that multiple courts have said

JCATSTA4

Langheim - Direct

1                   MR. MACH: I am starting a substantially different  
2 subject. If you want me to continue, I will be happy to,  
3 but --

4                   THE COURT: Why don't we adjourn then, 45 minutes.

5                   (Luncheon recess taken)

6                   (Continued on next page)

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JCAVSTA5

Langheim - direct

1           I did not see in this case that that evidentiary  
2 support was there. All right?

3           Thank you. Proceed.

4           MR. MACH: Thank you very much, your Honor.

5           THORSTEN LANGHEIM, resumed.

6           BY MR. MACH:

7           Q. Welcome back, Mr. Langheim.

8           I'd like to ask you some questions about DISH.

9           A. DISH, yes.

10          Q. Once it was clear to DT that DISH would be the divestiture  
11        buyer, you asked your team to evaluate DISH's potential to  
12        build its network, right?

13          A. Yes.

14          Q. And you asked your team to figure out what DISH could  
15        achieve in a worst-case scenario from DT's perspective, right?

16          A. Yes.

17          Q. And in response, your team conducted an analysis, right?

18          A. Yeah.

19          Q. And your team also engaged in a variety of other  
20        discussions about the probability of DISH building a  
21        significant wireless network in the United States; correct?

22          A. Yes. Correct.

23          Q. And your team assured you repeatedly that DISH is not going  
24        to build its own wireless network; correct?

25          A. They run analysis about how much they would buy a buildout

---

**From:** Stern, Steffen [/O=TMSX/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=S.STERN]  
**Sent:** 12/15/2015 4:37:25 PM  
**To:** Langheim, Thorsten [thorsten.langheim@telekom.de]  
**CC:** Budde, Matthias [matthias.budde@telekom.de]  
**Subject:** US Workshop 2 Doc

Thorsten,

anbei das Dokument für den morgigen US Workshop – dieses Mal sehr kompaktes Format.

Vorab: Hannes Wittig hat darum gebeten, auch am WS teilnehmen zu dürfen. OK für Dich?

Kern-Messages und Diskussionspunkte:

Starting point (recap from WS1)

- US market is and will be more attractive than EU portfolio markets
- TMUS won't earn its cost of capital in the next years, but contributes significant growth and positive FCF to DT, resulting in increasing EV

Discussion point 1: Competitive environment

- We do not expect major structural changes in US market in the next 2-3 years which will significantly affect TMUS
- Highest uncertainty coming from Sprint that may go bankrupt or start acting irrationally
- 2<sup>nd</sup> highest uncertainty from potential irrational moves of AT&T

Discussion point 2: What does this mean for TMUS?

- Based on our market analysis, we assume that TMUS will be able to deliver on its planning for the next 2-3 years (i.e. show future growth). We should discuss:
  - Will TMUS achieve planning?
  - When will growth stop?
- What are potential long-term consolidation scenarios?
- Sprint – preferred but feasibility?
- (subsequent) cable merger – preferred, seems feasible, but would cableCos also be interested in it?
- In case options above won't work out: America Movil, Altice as alternatives?
- BUT: We also might end up without a merger!
- Critical questions - and we should discuss these thoroughly:
- How to ensure that TMUS executes portfolio options before growth stops?
- How to ensure that TMUS can act in consolidations from a position of strength?

Looking forward to the discussion. Happy to align / discuss upfront if you wish to.

Best,  
Steffen



## CERTIFICATION

TransPerfect is globally certified under the standards ISO 9001:2015, ISO 17100:2015, and ISO 18587:2017. This Translation Certificate confirms the included documents have been completed in conformance with the Quality Management System documented in its ISO process maps and are, to the best knowledge and belief of all TransPerfect employees engaged on the project, full and accurate translations of the source material.

File Name(s): DT-DOJ-00085478 for translation

Source Language(s): German

Target Language(s): English

*Authorized Signature:*

A handwritten signature in black ink, appearing to read "Maria Jose Ramos Manrique".

Name: Maria Jose Ramos Manrique

Title: Senior Project Manager

Date: December 10<sup>th</sup>, 2019

Reason for signature: I approve the accuracy of this document content as written

---

**From:** Stern, Steffen [/O=TMSX/OU=EXCHANGE ADMINISTRATIVE GROUP (FY01BOHF23SPDLT)/CN=RECIPIENTS/CN=S.STERN]  
**Sent:** 12/15/2015 4:37:25 PM  
**To:** Langheim, Thorsten [thorsten.langheim@telekom.de]  
**CC:** Budde, Matthias [matthias.budde@telekom.de]  
**Subject:** US Workshop 2 Doc

Thorsten,

Attached please find the document for tomorrow's workshop – it will be a very compact format this time.

In advance: Hannes Wittig has therefore also asked to take part in the WS. Is that OK for you?

**Key messages and points for discussion:**

**Starting point (recap from WS1)**

- US market is and will be more attractive than EU portfolio markets
- TMUS won't earn its cost of capital in the next years, but contributes significant growth and positive FCF to DT, resulting in increasing EV

**Discussion point 1: Competitive environment**

- We do not expect major structural changes in US market in the next 2-3 years which will significantly affect TMUS
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- BUT: We also might end up without a merger!
- Critical questions - and we should discuss these thoroughly:
- How to ensure that TMUS executes portfolio options before growth stops?
- How to ensure that TMUS can act in consolidations from a position of strength?

Looking forward to the discussion. Happy to align / discuss upfront if you wish to.

Best,  
Steffen

# DTAG – DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL

Workshop II  
16.12.2015

Discussion  
document

U.S.

## US MARKET IS AND WILL CONTINUE TO BE MORE ATTRACTIVE THAN DTEU PORTFOLIO MARKETS



US market structure is and will be different vs. EU<sup>1</sup>



Competition is and will remain lower than in EU



- No nationwide fixed net players
- Less consumer choice for fixed BB/TV



US ARPUs will remain significantly higher than in EU



Even disruptive market trends will not change the picture

- Though no increase expected
- ... and also CAPEX levels significantly higher

Redaction - Privileged

- In US, large domestic players key beneficiaries

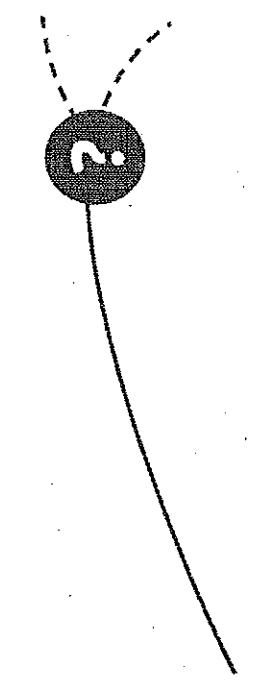
Redaction - Privileged

*Details in appendix*



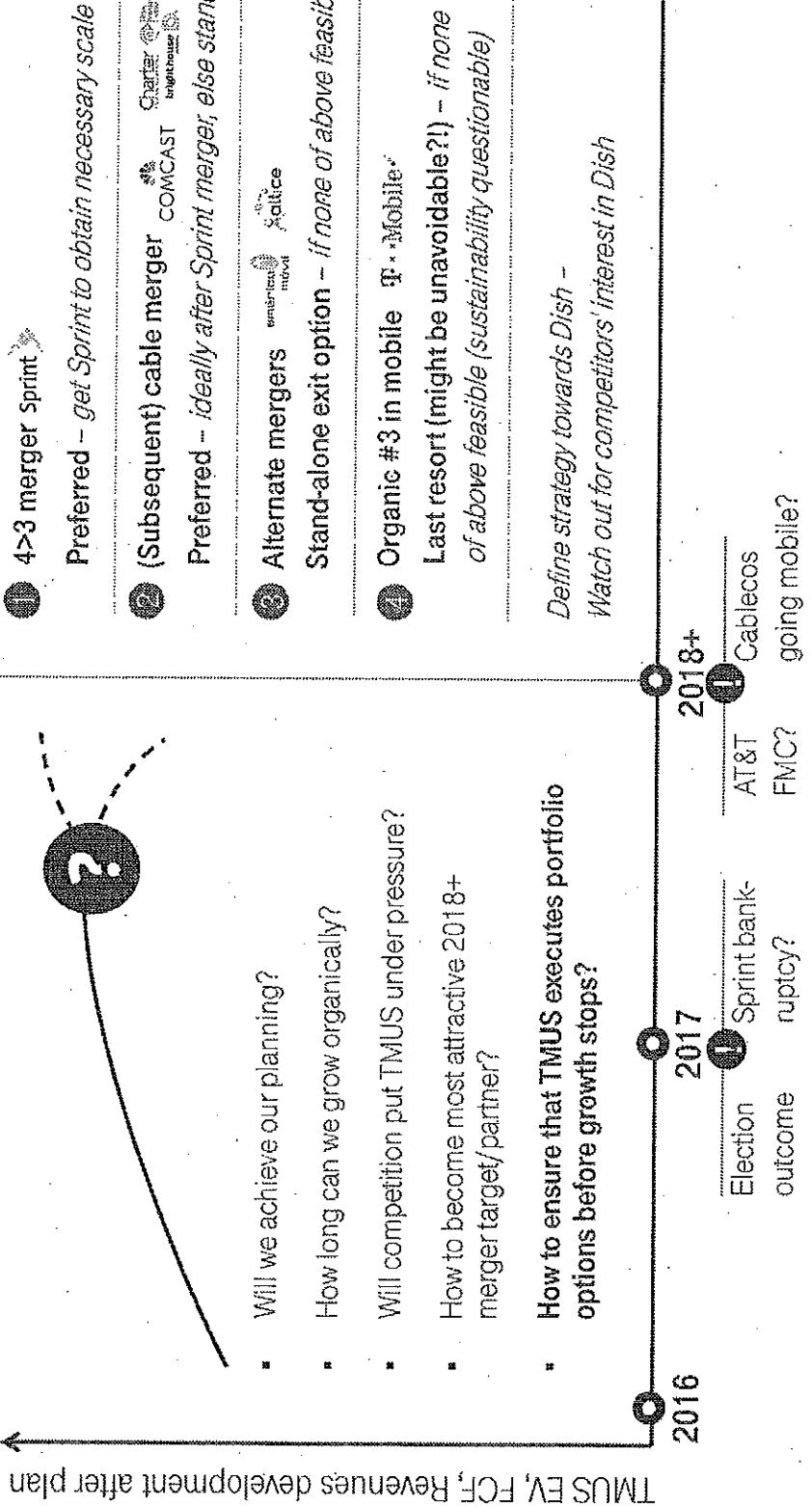
# TMUS TO CONTINUE ORGANIC GROWTH TILL 2018 – PLAY TOWARDS SPRINT AND (THEN) CABLE MERGER

TMUS STRATEGY SCHEMATIC OVER TIME

Phase I – Continue organic growth<sup>1</sup>

Phase II – Participate in market consolidation

- ① Event may alter market structure
- ② Deep dive to follow



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# PHASE II: SPRINT AND COMCAST MOST LIKELY MERGER PARTNERS – BUT THERE MIGHT ALSO BE NO ONE?

## FCR DISCUSSION

		Key strategic rationale(s)	Strategic or regulatory barrier(s)
1	Potential TMUS end-games	Sprint on verge of bankruptcy (would love to merge)	Redaction - Privileged
2	4>3 mobile merger	Clear scale gain and synergy potential for TMUS to own ~30% of mobile market (at scale with AT&T, VZ)	Redaction - Privileged (Analysis: even with Republican administration only <50% probability <sup>1</sup> )
3	(Subsequent) cable merger	Move into mobile might be only natural option for Comcast to grow.	Redaction - Privileged
4	Charter	Potential move into mobile as adjacency play (e.g., eyeball increase, mobile video, cost synergies)	Redaction - Privileged
5	brighthouse	Creation of one North American service market and synergy potentials with existing verticals	Redaction - Privileged
6	Altice	Return to execution of core business model vs. current MVNO play (TracFone)	Redaction - Privileged
7	Altice	Move into mobile could be an opportunistic adjacency play for Altice	Redaction - Privileged
8	Organic #3	No merger opportunity can be exercised (due to barriers)	Redaction - Privileged

Source: Team Analysis, Expert Interviews

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# PHASE I: TMUS PLAYBOOK TILL 2018

Action path till eoy 2017

- Continue Uncarrier growth
  - Continue Uncarrier growth in B2C according to plan<sup>1</sup> or above
  - Explore further growth adjacencies (e.g., B2B, IoT, M2M, mobile video)
- Secure sufficient spectrum
  - Bid in next incentive auction
  - Define strategy towards Dish spectrum (i.e., what is the right acquisition price?) – Hypothesis: Dish currently a distraction – wait until their negotiation power is weakened
  - Continue network densification as needed
- Pave way for market consolidation
  - Continue value strategy to keep 4>3 merger optionality

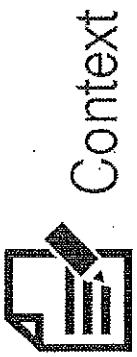
## Redaction - Privileged

- Show openness to consolidate
  - Signal TMUS interest in Sprint and position Sprint as difficult asset for cablecos<sup>2</sup>
  - Signal TMUS interest in (subsequent<sup>3</sup>) cable merger and advertise superiority over VZ
- Invest in assets and activities that complement a cableco merger (i.e., large and valuable customer base, network strength, ad and mobile video capabilities)
- Consider MVNO cableco deal to establish long-term partnerships?

1 Customer, revenue, EBITDA, FCF and EV growth      2 Especially for Comcast, Charter Group and AT&T  
Source: Team Analysis, Expert Interviews      3 After T-Mobile + Sprint merger if feasible



# DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL



## Context

DT has 2 large portfolio elements besides Germany and UK: TMUS and DTEU

- TMUS delivered strong performance over past 2 years<sup>1</sup> and drives DT's growth
- EU portfolio has been struggling<sup>2</sup> and recovery to stable business is uncertain

In consequence, TMUS gained more importance within DT (revenues and EBITDA) while the EU portfolio has lost in relevance

However, stability of TMUS business model in long-run unsure given its sub-scale position, competitive environment, and potential market changes



## Objective

Create a deeper understanding of differences in US vs. DTEU portfolio market environment, structure and attractiveness

- Identify major trends for the US that can disrupt current telco business models

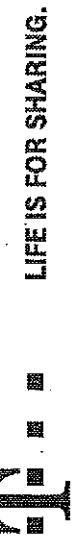
Develop potential market "end-game" archetypes for the US

- Outline options for TMUS to address key challenges in respective "end-game" archetypes (i.e., defining a winning position)

<sup>1</sup> +20% revenue from Q2/13 to Q2/15, +34% total customers from Q2/13 to Q2/15

<sup>2</sup> -8% revenue from Q2/13 to Q2/15

Source: DT&G



# RECAP WS 1 – US MARKET IS AND WILL CONTINUE TO BE MORE ATTRACTIVE THAN DTEU PORTFOLIO MARKETS

## Key findings

### US market structure is and will be different vs. EU<sup>1</sup>

- No nationwide fixed net players

- Competitive authorities did not allow Comcast/TWC merger and split up AT&T in the past – no change in FCC ruling expected in this respect
- MN/NOs on purely commercial terms & not enforced by regulator – neither change in regulation, nor irrational MN/NO pricing behavior of MN/NOs expected

### Competition is and will remain lower than in EU

- Less consumer choice for fixed BB/V

- Fixed: Limited broadband overbuild / regional monopolies and high barriers to entry
- Mobile: New WiFi-First / MN/NO based players will not gain significant mobile share given unattractive financials of such business (rationale MN/NO behavior expected) and limited capabilities (i.e., no brand, lacking channels, handsets)

## Rationale<sup>1</sup>

- Competitive authorities did not allow Comcast/TWC merger and split up AT&T in the past – no change in FCC ruling expected in this respect
- MN/NOs on purely commercial terms & not enforced by regulator – neither change in regulation, nor irrational MN/NO pricing behavior of MN/NOs expected
- Fixed: Limited broadband overbuild / regional monopolies and high barriers to entry
- Mobile: New WiFi-First / MN/NO based players will not gain significant mobile share given unattractive financials of such business (rationale MN/NO behavior expected) and limited capabilities (i.e., no brand, lacking channels, handsets)

## Redaction - Privileged

- In US, large domestic players are key beneficiaries

### US ARPU will remain significantly higher than in EU

- Though no increase expected
- ...and also CAPEX levels significantly higher

### Even disruptive market trends will not change the picture

<sup>1</sup> Based on analysis / expert discussions

<sup>2</sup> EU refers to DTEU portfolio countries

<sup>3</sup> Redaction - Privileged

Source: DTAG, Team Analysis



## Redaction - Privileged

- Key beneficiaries of US regulation are large US players as Sprint/TMUS suffer from scale disadvantages
- Both ARPUs and required invest ~2x higher than in EU (hence US industry ROCE level not superior)
  - US customers more value focused & with higher usage - less price elastic than in EU
  - US customers with significantly higher disposable income (2-3x higher than in EU)
  - No detrimental pricing moves expected; lower competition, less regulation & more favorable market structure
- Convergence (FMC, mobile + TV); could emerge driven by AT&T and VZ/Comcast, but value protecting approach expected (EU seen as bad example) + lack of countrywide fixed net reduces incentive & impact eSIM / OEM taking over customers; due to lack of MN/NO tracking no disruptive impact expected, Sprint alone not sufficient to make eSIM a success.

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FOR DISCUSSION

1C

# Redaction - Privileged

Sprint

## Redaction - Privileged

It's going to be hard for someone to make a persuasive case that reducing 4 firms to 3 is actually going to improve competition for the benefit of American consumers.

- William Baer, DOJ

We must protect competition where it exists. Our goal should be to ask how competition can best serve the public.

- Tom Wheeler, FCC

Were [the deal] somehow approved, there would be numerous conditions attached, such as the divestiture of spectrum/other assets and imposition of a wholesale mandate that would bleed off a portion of the financial benefits.

- UBS

Source: Press Analysis, DTAG, Team analysis

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DT-DOJ-00085501  
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# Redaction - Privileged



## Current Sprint situation at a glance

Financial distress



## Outlook for the next ~12 months

Continued support from Softbank expected



Outcome 1 – Sprint turnaround fails and bankruptcy is unavoidable



- Low EBIT margins (~6% in 2014, ~2% in 2015)
- ~4.5bn USD cash burn rate expected for 2015

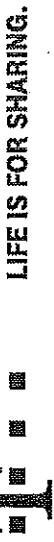
- Debt of 2.5bn matures in 12/2016 (currently no source for refinancing)

## Turnaround initiative started

- 2.5bn USD cost-cutting program started in Q2/2015
- Aggressive pricing (i.e., unlimited plan for 60 vs. 80 USD for TMUS).

## Redaction - Privileged

SOURCE: Analyst reports, Team analysis



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[FOR DISCUSSION]



COMCAST

KEY PARAMETERS AT A GLANCE

## AS 2018+ OPTIONALITY

# 2 PREPARE FOR COMCAST BUYING TMUS

### ② Strategic rationale for Comcast?

- Move into mobile might be only natural option to grow  **Redaction - Privileged**
- Several strategic advantages
  - Increase eyeballs
  - Bring video content onto mobile (i.e., linear/OTT)
  - FMC ability in select areas (but w/o massive discounts; i.e., broadband & mobile bundle for cord cutters)
  - Realize cost and network synergies
    - through economies of scale
    - Fits with WiFi first approach

### ③ TMUS for optionality?

- Bid for spectrum & continue densification
- Increase customer base (i.e., especially younger, video affine demographics)
- Signal Sprint as difficult asset for Comcast and signal interest to merge with Comcast subsequent to potential TMUS + Sprint merger
- Don't enter into fixed (i.e., wholebuy, FMS) without thinking through what it means for Comcast merger

### “So What” for TMUS

- Preferred merger – ideally after Sprint merger, else stand-alone
- Be attractive bride by investing in network strength and growth of subscriber base
- Avoid Comcast + Sprint or VZ merger (signal Sprint as difficult target)
- Signal merger interest with Comcast (i.e., à la "you can get a merged TMUS + Sprint")

Deep dive to follow

### ④ Key Do's and Don'ts to dress TMUS for optionality?

- Bid for spectrum & continue densification
- Increase customer base (i.e., especially younger, video affine demographics)
- Signal Sprint as difficult asset for Comcast and signal interest to merge with Comcast subsequent to potential TMUS + Sprint merger
- Don't enter into fixed (i.e., wholebuy, FMS) without thinking through what it means for Comcast merger

### ⑤ Alternate brides for Comcast?

- Sprint
  - If still existent and stabilized
  - Pending FCC approval (i.e., largest fixed/mobile player, vertical integration)
- verizon

### ⑥ Deal likelihood?

- Low
- High

### ⑦ Combined network effects?

- ~90mn people with Comcast access in the states where TMUS has >70% coverage<sup>1</sup>
- ~59mn TMUS customers vs. ~22mn Comcast TV & ~23mn Broadband subscribers

### ⑧ Regulatory barriers?

- Redaction - Privileged**



### ⑨ LIFE IS FOR SHARING.

<sup>1</sup> Percent of the population with T-Mobile wireless access in that geography  
Source: Team Analysis, Analysts' reports, Capital IQ, BroadbandNow.com

**Redaction - Privileged**

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# PREPARE FOR CHARTER GROUP MERGER AS 2018+ OPTIONALITY

## KEY PARAMETERS AT A GLANCE

## 1) Strategic rationale for Charter Group?

- Potential move into mobile as adjacency play
- Several strategic advantages
  - Increase eyeballs
  - Bring video content onto mobile (i.e., linear/OTT)
  - FMC ability in select areas (but w/o massive discounts; i.e., broadband & mobile bundle for cord cutters)
  - Realize cost and network synergies through economies of scale
  - Fits with Wi-Fi first approach

## ! Key Do's and Don'ts to dress TMUS for optionality

- Increase customer base (i.e., especially younger, video affine demographics)
- Bid for spectrum & continue densification
- Signal Sprint as difficult asset for Charter Group and show interest in (subsequent) Charter deal
- Don't enter into fixed (i.e., wholesalebuy, FMS) without

## ④ Alternate brides for Charter group?

- ✓ Sprint significantly stabilized
- ✓ Pending FCC approval (i.e., largest fixed/mobile player, vertical integration)

11

- Fits with Wi-Fi first approach

- ~80mn people with Charter Group access in the states where TMUS has a >70% coverage<sup>1</sup>
- ~59mn TMUS customers vs. ~17mn Charter Group TV & ~20mn Broadband subscribers

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Times  
Weather  
Calendar  
Charter  
bright house

Deep dive to follow

“What” for  
TMUS

Preferred merger – if possible after Sprint merger, else stand-alone	Be attractive bride by investing in network strength and growth of subscriber base	Avoid Charter + Sprint or VZ merger (signal Sprint as difficult target)
--	---	---

Signal merger interest  
with Charter  
(i.e., à la "you can get a  
merged TMUS+Sprint")

**real likelihood?**

PRO: Strategic rationale (see section a)

CON: Occupied with post-merger efforts for next 1-3 years, financially torn, higher synergies with fixed players (i.e., CenturyLink, Frontier), no wireless experience, limited FCC ability

Source: Team Analysis, Analyst reports, Capital IQ, Stockboard.com, Broadbandmap.gov  
Redaction - Proprietary

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Case: 1:19-cv-05435-VM

FOR DISCUSSION

## ② STRONG NETWORK TOGETHER WITH SUB + FCF GROWTH KEY TO DRESS FOR CABLECOS

### Do's

- ➡ **Invest in a strong network** (i.e., acquire spectrum, increase densification, engage in WiFi offloading)
- ➡ **Increase customer base** – focus especially on the younger, video affine demographics that consume significant amounts of mobile video
- ➡ **Further strengthen P&L and balance sheet** – to allow TMUS enter into merger negotiations from a position of strength
- ➡ **Consider creation of mobile-only video content** (i.e. short form) that could be integrated in cablecos OTT offering
- ➡ **Safeguard and further expand “sexy and innovative” T-Mobile image**
- ➡ **Try to establish/acquire attractive mobile ad-technology** that is feasible for both mobile and cable players

### VS

### Don'ts

- ✖ **Don't decrease prices and ARPU levels too much** for the sake of customer growth / as reaction to Sprint
- ✖ **Don't experiment with offers that could increase churn** of existing customer base
- ✖ **Don't duplicate “innovative capabilities”** that are already present at cablecos but lacking at TMUS
- ✖ **Don't enter the wireline domain**<sup>1</sup>, i.e., own build-out, commercial whole-buy, FMS – might make cable moves more difficult and a financial benefit unlikely

COMCAST

Charter Time Warner  
BrightHouse

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FOR DISCUSSION



# 3 PREPARE FOR AMERICA MOVIL MERGER AS 2018+ OPTIONALITY

KEY PARAMETERS AT A GLANCE

## 2 Strategic rationale for America Movil?

- Become full-fledged US MNO (execution of AM's core business model)
- Several strategic advantages
  - Increased eyeballs (>83mn mobile subs)
  - Creation of one North American mobile service market (US, Mexico)
  - Realization of cost synergies through economies of scale and MNO-to-MNO transition

## 6 Key Do's and Don'ts to dress TMUS for optionality?

- ✓ Increase customer base
- ✓ Bid for spectrum & continue densification
- ✓ Signal Sprint as difficult asset for AM
- ✓ Signal merger interest to AM
- ✓ Ensure that any potential MVNO deal is long-term beneficial to TMUS
- ✗ Don't engage in price war (sustain ARPU)

## "So What" for TMUS

Potential stand-alone exit option - if Comcast merger not feasible	Avoid AM + Sprint merger (signal Sprint as difficult target)
Signal merger interest with AM (ideally subsequent to Sprint merger)	Be an attractive bride (enhance network and grow subs)

## 6 Combined network effects?

- 25.7mn mobile subscribers in US via MVNO TracFone
- Merged company could have >100mn mobile subscribers by 2019!

## 6 Alternate brides for AM?

- If still existent and significantly stabilized
- Sprint

## 3 Deal likelihood?



## Regulatory barriers?



## Redaction - Privileged

<sup>†</sup> TMUS subscriber base forecasted to be ~76mn by 2019  
Source: Team Analysis, Analyst reports, Capital IQ, Broadbandnow.com

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FOR DISCUSSION

Altice

# 3 PREPARE FOR ALTICE MERGER AS 2018+

## OPTIONALITY

KEY PARAMETERS AT A GLANCE

### a Strategic rationale for Altice?

- Move into mobile could be an opportunistic adjacency play for Altice (much like a PE player)



### "So What" for TMUS

- Be attractive bride by investing in network strength and growth of subscriber base
- Avoid Altice + Sprint merger (signal Sprint as too challenging to turn around)

### b TMUS for optionality

- Bid for spectrum & continue densification
- Increase customer base
- Signal Sprint turnaround as too challenging for Altice (given no wireless experience nor relevant synergies)
- Ensure that any potential MVNO deal is long-term beneficial to TMUS
- Don't engage in price war (sustain ARPU)

### c Key Do's and Don'ts to dress

### d Combined network effects?

- ~16.9mn people with Altice access in the states where TMUS has a >70% coverage<sup>1</sup>
- ~59mn TMUS customers vs. ~3.5mn Altice TV (of which about 2.5mn in NY) and ~4mn broadband subscribers



### e Regulatory barrier?



### f Potential alternate Altice targets

- Sprint
  - If still existent and stabilized



### g Deal likelihood?

- UNLIKELY : Higher synergies with fixed players (i.e., Centurylink, Frontier); Sprint much better fit for their lean turnaround playbook
- Low
- High

### Redaction - Privileged

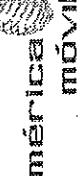
<sup>1</sup> Percent of the population with T-Mobile wireless access in that geography  
Source: Team Analysis, Analyst reports, Capital IQ, BroadbandNow.com

LIFE IS FOR SHARING.  


# 5 DON'TS TO MAINTAIN 2018+ MERGER OPTIONS

FOR DISCUSSION

- Don't enter into MVNO deal that could complicate consolidation  
(Deals should increase TMUS value)  
  
Key partner/merger options
- Don't trigger a price war in the US market  
(Stable ARPU's base drives attractiveness & valuation)  

- Redaction - Privileged**  
  
Don't invest in asset heavy media, i.e., content rights or production  
(Lack of scale for TMUS and unlikely return on capital)  
  
Don't enter the wireline domain<sup>1</sup>, i.e., own build-out, whole-buy, FMS  
(Might make cable moves more difficult + financial benefit unlikely)  

- Don't enter the wireline domain<sup>1</sup>, i.e., own build-out, whole-buy, FMS  
(Might make cable moves more difficult + financial benefit unlikely)

<sup>1</sup> Without having a long-term strategy that includes a consolidation plan

Source: Team Analysis

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Page 1

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

4 STATE OF NEW YORK, STATE OF )  
5 CALIFORNIA, STATE OF COLORADO, )  
6 STATE OF CONNECTICUT, DISTRICT )  
7 OF COLUMBIA, STATE OF )  
8 MARYLAND, STATE OF MICHIGAN, ) 1:19-cv-05434 (VM)  
9 STATE OF MISSISSIPPI, )  
10 COMMONWEALTH OF VIRGINIA, and )  
11 STATE OF WISCONSIN, )  
12 Plaintiffs, )  
-against- )  
13 DEUTSCH TELECOM AG, T-MOBILE )  
14 US, INC., SPRINT CORPORATION )  
15 and SOFTBANK GROUP CORP., )  
16 Defendants. )

VIDEOTAPED DEPOSITION UPON ORAL EXAMINATION OF

## PETER EWENS

**HIGHLY CONFIDENTIAL**

9:04 A.M.  
SEPTEMBER 12, 2019  
925 FOURTH AVENUE, SUITE 2900  
SEATTLE, WASHINGTON

25 REPORTED BY: CARLA R. WALLAT, CRR, RPR, CCR 2578

<p style="text-align: right;">Page 42</p> <p>1 takes place, DISH will only be able to provide service 2 to its own customers initially by sharing the T-Mobile 3 network, right?</p> <p>4 MS. LEVIN: Objection.</p> <p>5 A. DISH is not sharing in a network sharing 6 arrangement with T-Mobile. DISH has a 7 infrastructure-based MVNO with T-Mobile.</p> <p>8 Q. (BY MR. MACH) But in terms of providing 9 service to its customers, DISH will not have its own 10 network, correct?</p> <p>11 A. DISH initially will not have its own network, 12 but is committed to build a network.</p> <p>13 Q. Right. That's a fair clarification.</p> <p>14 Initially DISH will not have its own network, correct?</p> <p>15 A. That's correct.</p> <p>16 Q. So it must rely on T-Mobile's network to serve 17 its customers, correct?</p> <p>18 A. That's correct.</p> <p>19 Q. Okay. So T-Mobile -- strike that.</p> <p>20 So DISH will not have a basis for network 21 differentiation with T-Mobile, right?</p> <p>22 MS. LEVIN: Objection.</p> <p>23 A. DISH will be using T-Mobile's network 24 initially. That's absolutely right. But over time, 25 they will build their own network and they will have an</p>	<p style="text-align: right;">Page 44</p> <p>1 with in those workshops included people you really 2 trust, right?</p> <p>3 MS. LEVIN: Objection.</p> <p>4 A. At least one of the persons I knew well and I 5 respected.</p> <p>6 Q. (BY MR. MACH) And you really trusted him, 7 right?</p> <p>8 A. That's correct.</p> <p>9 Q. And who was that person?</p> <p>10 A. Peter Bisson.</p> <p>11 Q. And you personally assisted DT employees in 12 the preparation of the materials for those discussion 13 workshops in December 2015, right?</p> <p>14 A. No, I did not. Those materials were 15 prepared -- to my recollection, those materials were 16 prepared by McKinsey for DT.</p> <p>17 Q. Well, my question, sir, was not whether you 18 prepared the materials, but whether you personally 19 assisted the DT employees in the preparation of the 20 materials. Did you do that?</p> <p>21 A. No, I did not. I don't recall. I think I was 22 sent the documents pretty much near the end in advance 23 of the workshops.</p> <p>24 MR. MACH: Introduce a document that 25 will be Ewens Exhibit 58.</p>
<p style="text-align: right;">Page 43</p> <p>1 opportunity to combine, uniquely combine those networks 2 and offer differentiated services.</p> <p>3 Q. (BY MR. MACH) And the agreement that you have 4 with DISH, it places a specific limit on how much of 5 T-Mobile's network DISH can use to serve its own 6 customers, right?</p> <p>7 MS. LEVIN: Objection.</p> <p>8 A. The -- the agreement with DISH actually allows 9 DISH unlimited access to the T-Mobile network for the 10 first three years. Thereafter, there are limits on 11 Dish's ability to use the network, but the whole 12 strategy is for DISH to begin to -- to build their own 13 network and begin to migrate traffic to their own 14 facilities.</p> <p>15 Q. (BY MR. MACH) Let's shift gears a little bit. 16 In December 2015, you took part in a series of 17 discussion workshop -- workshops with DT, correct?</p> <p>18 A. Yes, I did.</p> <p>19 Q. And those workshops included participants from 20 T-Mobile, DT and also McKinsey, correct?</p> <p>21 A. Yes, they did.</p> <p>22 Q. You've worked with McKinsey a number of times 23 at T-Mobile, right?</p> <p>24 A. Yes, I have.</p> <p>25 Q. And the team from McKinsey that you worked</p>	<p style="text-align: right;">Page 45</p> <p>1 (Deposition Exhibit 58 was marked for 2 identification.)</p> <p>3 MR. MACH: I'm sorry, I can't reach it.</p> <p>4 MS. LEVIN: That's all right.</p> <p>5 Q. (BY MR. MACH) Sir, do you recognize what's 6 been marked as Ewens Exhibit 58 as an email thread 7 between you and Mr. Stern of DT in November of 2015?</p> <p>8 MS. LEVIN: Objection.</p> <p>9 A. I'm sorry, can you repeat the question?</p> <p>10 Q. (BY MR. MACH) Sure. I'll -- I'll strike the 11 question and ask it again.</p> <p>12 Do you recognize Ewens Exhibit 58 as an email 13 thread between you and Mr. Stern, among others, in -- 14 in November of 2015?</p> <p>15 A. Yes, I do.</p> <p>16 Q. And is this something you would have created 17 in the ordinary course of your business?</p> <p>18 A. Yes.</p> <p>19 Q. Okay. And this thread discusses preparations 20 for the workshops you participated in with DT in 21 December 2015, right?</p> <p>22 A. That's correct.</p> <p>23 Q. And Mr. Stern at the time was the VP of 24 portfolio strategy for DT, correct?</p> <p>25 A. I don't remember his title, but that sounds</p>

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<p style="text-align: right;">Page 46</p> <p>1 plausible.</p> <p>2 Q. And in this email thread, Mr. Stern wrote</p> <p>3 asking for your assistance in preparing materials for</p> <p>4 the workshops, right?</p> <p>5 MS. LEVIN: Objection.</p> <p>6 A. Can I look at the email?</p> <p>7 Q. (BY MR. MACH) Absolutely.</p> <p>8 A. Yeah, in this email, Mr. Stern requests</p> <p>9 materials that we -- from the U.S. and he also requests</p> <p>10 time for an interview to learn more about a series of</p> <p>11 questions.</p> <p>12 Q. An interview with you?</p> <p>13 A. I believe the interview was with Sarah Bond.</p> <p>14 Q. And the top email in the thread on the page</p> <p>15 that ends 99484 has Mr. Stern saying "Looking forward</p> <p>16 to the call tomorrow."</p> <p>17 Do you see that, sir?</p> <p>18 A. Yes.</p> <p>19 Q. And did you hold a call with Mr. Stern about</p> <p>20 the workshops as suggested in this thread?</p> <p>21 A. Yes, I believe we did.</p> <p>22 Q. And what did you discuss with Mr. Stern on</p> <p>23 that call?</p> <p>24 A. I don't recall all the questions we discussed.</p> <p>25 This -- there looks to be a question outline in this</p>	<p style="text-align: right;">Page 48</p> <p>1 A. Yes, I did.</p> <p>2 Q. Okay. I'm going to ask the court reporter to</p> <p>3 please mark Exhibit 59.</p> <p>4 (Deposition Exhibit 59 was marked for</p> <p>5 identification.)</p> <p>6 Q. (BY MR. MACH) Do you have Exhibit 59 in front</p> <p>7 of you, sir?</p> <p>8 A. Yes, I do.</p> <p>9 Q. And do you recognize Exhibit 59 as the slide</p> <p>10 deck that was used in the first workshop -- workshop</p> <p>11 session in Germany in 2015?</p> <p>12 A. Yes, I do.</p> <p>13 Q. And that's something that was created in the</p> <p>14 normal course of your business, right?</p> <p>15 MS. LEVIN: Objection.</p> <p>16 A. This was created by Deutsche Telekom. And I</p> <p>17 don't know whether it was created in their normal</p> <p>18 course of business or not.</p> <p>19 Q. (BY MR. MACH) Fair enough.</p> <p>20 Would you please turn to me -- with me to the</p> <p>21 slide that's marked 4, it's Bates Number ending</p> <p>22 00999374.</p> <p>23 This slide lays out the objectives for the</p> <p>24 first meeting, correct -- strike that. Sorry.</p> <p>25 This slide lays out the objectives for the two</p>
<p style="text-align: right;">Page 47</p> <p>1 email.</p> <p>2 Q. Do you remember any of the questions you</p> <p>3 discussed?</p> <p>4 A. I do not.</p> <p>5 Q. You then participated in the first workshop --</p> <p>6 strike that. Let's take a step back.</p> <p>7 Does this refresh your recollection that you</p> <p>8 personally assisted DT employees in the preparation of</p> <p>9 the materials for the December 2015 discussion</p> <p>10 workshops in Germany?</p> <p>11 MS. LEVIN: Objection.</p> <p>12 A. What we did is we provided information to them</p> <p>13 and we participated in I believe at least one call</p> <p>14 where they had asked us questions, but we did not have</p> <p>15 a hand in preparing the documents for the workshop at</p> <p>16 all.</p> <p>17 Q. (BY MR. MACH) Got it.</p> <p>18 You provided input to DT and they wrote the</p> <p>19 documents. Is that fair?</p> <p>20 A. Yes, we provided information and tried to be</p> <p>21 responsive to questions, but we did not have a hand in</p> <p>22 preparing the documents at all.</p> <p>23 Q. Thank you.</p> <p>24 You then participated in the first workshop</p> <p>25 session in Germany on December 3rd, 2015, right?</p>	<p style="text-align: right;">Page 49</p> <p>1 workshops, right, sir?</p> <p>2 A. Yes, that's what this slide appears to do.</p> <p>3 Q. And the next page shows the participants for</p> <p>4 the first meeting, right?</p> <p>5 A. These were the participants that were invited,</p> <p>6 but I don't believe everybody was there.</p> <p>7 Q. So who wasn't there?</p> <p>8 A. I don't recall, but the meeting was much, much</p> <p>9 smaller. This is a long list of participants and --</p> <p>10 well, these are the experts at the meeting. I don't</p> <p>11 recall all the people who were there, but we -- you</p> <p>12 know, Thorsten, for example, wasn't in the whole</p> <p>13 meeting. We may have had one or two other people, but</p> <p>14 this wasn't -- this wasn't the exact set of</p> <p>15 participants.</p> <p>16 Q. So I'm looking at slide 5. Are you looking at</p> <p>17 slide 5?</p> <p>18 A. Yes.</p> <p>19 Q. Okay. And it shows six individuals, including</p> <p>20 you, Mr. Stern, Mr. Langheim.</p> <p>21 A. Yes.</p> <p>22 Q. And Mr. Langheim was present for at least some</p> <p>23 of the meetings, correct?</p> <p>24 A. There were two workshops. Mr. Langheim was</p> <p>25 present for part of at least one of the meetings, but I</p>

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<p>1 Q. Well, it has proven true since 2015 that new 2 mobile entrants have not become relevant players in 3 your marketplace, hasn't it?</p> <p>4 MS. LEVIN: Objection.</p> <p>5 A. Actually, I disagree with that. I believe 6 cable companies have entered and they've become 7 relevant mobile players. So I don't actually agree 8 that your statement is true.</p> <p>9 Q. (BY MR. MACH) So in 2015 when these 10 predictions were laid -- strike that. Excuse me.</p> <p>11 Since 2015 when these predictions were laid 12 out, your predictions about how the market would evolve 13 have proven wrong?</p> <p>14 MS. LEVIN: Objection.</p> <p>15 Q. (BY MR. MACH) Is that what you're saying?</p> <p>16 MS. LEVIN: Objection. It 17 mischaracterizes the testimony.</p> <p>18 A. These are not my -- these are not my 19 predictions of how the U.S. market would evolve. As I 20 told you before, this is a DT prepared document and 21 some things I might agree with and other things I 22 don't. But these are not my predictions of how the 23 U.S. market would evolve.</p> <p>24 Q. (BY MR. MACH) Today or in 2015?</p> <p>25 A. In 2015.</p>	<p>Page 58</p> <p>1 statement.</p> <p>2 Q. (BY MR. MACH) Well, what's the connection 3 between commercially rationale contracts and the 4 ability of a new entrant to compete?</p> <p>5 MS. LEVIN: Objection.</p> <p>6 A. I don't know what you mean by "commercially," 7 and I know -- I don't know what this document means by 8 "commercially rationale contract."</p> <p>9 Q. (BY MR. MACH) Okay. And in the right-hand 10 side of -- side of that slide there's a box and it says 11 "So what" for TMUS."</p> <p>12 Do you see that, sir?</p> <p>13 A. Yes.</p> <p>14 Q. That's T-Mobile US, right?</p> <p>15 A. That's correct.</p> <p>16 Q. Okay. And the conclusion was "Emergence of 17 MVNO entrants unlikely," correct?</p> <p>18 A. That's what the document says.</p> <p>19 Q. Well, was that the view that DT expressed to 20 you in 2015?</p> <p>21 A. I don't recall. I don't recall discussing 22 this specific page. What the document says is 23 "Emergence of MVNO entrants unlikely," but I don't 24 recall that specific discussion from the workshop.</p> <p>25 Q. A few more questions about this document.</p>
<p>Page 59</p> <p>1 Q. Okay. So you're saying that in 2015, you 2 thought that this document was incorrect about trend 3 Number 1?</p> <p>4 A. In 2015, I don't have a particular view, and I 5 can't tell you which statement in 2015 I agreed with 6 or -- or I didn't agree with. What I can tell you is 7 these are DT's predictions, or appear to be DT's 8 predictions as encapsulated in this document, and I 9 probably agreed with some of them but didn't 10 necessarily agree with all of them.</p> <p>11 Q. Understood. Thank you.</p> <p>12 Turn with me, please, to slide 24. I'm just 13 hoping you can help me understand this. In the middle 14 of the slide it says "U.S. MVNO agreements based on 15 commercial terms. All four mobile players will 16 continue to engage in commercially rationale 17 contracts."</p> <p>18 Do you see that?</p> <p>19 A. Yes, I do.</p> <p>20 Q. Okay. What does that mean?</p> <p>21 MS. LEVIN: Again, Mr. Ewens, if you 22 want to look at the whole slide, you're welcome to do 23 that.</p> <p>24 A. Yeah, I don't know exactly what this means.</p> <p>25 Again, this is a DT document and this is a DT</p>	<p>Page 61</p> <p>1 Slide 33, please. And slide 33 discusses industry 2 consolidation, right?</p> <p>3 A. Yes.</p> <p>4 Q. Including the potential merger of T-Mobile and 5 Sprint, correct?</p> <p>6 A. That's what the document says.</p> <p>7 Q. And regarding the T-Mobile Sprint merger, the 8 slide says: "Regulatory approval on short-term regarded 9 as unlikely."</p> <p>10 Do you see that, sir?</p> <p>11 MS. LEVIN: I'm sorry, could you direct 12 us to that?</p> <p>13 A. I'm sorry, can you point that -- to that -- 14 point me to that.</p> <p>15 Q. (BY MR. MACH) That is a totally reasonable. 16 question. In the box on the right-hand side of the 17 slide, the first bullet says: "Sprint merger as 18 natural strategic step to obtain nationwide scale - 19 however, regulatory approval on short-term regarded as 20 unlikely."</p> <p>21 Do you see that, sir?</p> <p>22 A. I do.</p> <p>23 Q. So why was regulatory approval of the T-Mobile 24 and Sprint merger regarded as unlikely in 2015?</p> <p>25 MS. LEVIN: Objection.</p>

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1 A. As I say, this is not my document, this is 2 DT's document. And I don't know where they developed 3 those points of view, but it is not necessarily my 4 point of view at the time.	1 to there would be T-Mobile, AT&T and Verizon, correct?
5 Q. (BY MR. MACH) Well, did -- did you agree with 6 that point of view in 2015?	2 A. Yeah, I think the -- the only issue is that 3 would be three -- maybe it should say three -- three -- 4 three network owners, but -- but yes.
7 A. I don't recall whether I agreed with that 8 point of view or not.	5 Q. Let's go to the next slide, please. Slide 35.
9 Q. And did DT express to you any reason why 10 regulatory approval might be unlikely?	6 MS. LEVIN: 34 or 35?
11 A. No, I don't recall.	7 MR. MACH: 35. That's helpful.
12 Q. Now --	8 Q. (BY MR. MACH) And in the upper left-hand 9 corner of the slide, it says "Still no mobile wholesale 10 obligation, thus no new disruptive market entries 11 (MVNOs)."
13 MS. LEVIN: I'm sorry, was that question 14 about 2000 -- strike that. I withdraw my question.	12 Do you see that, sir?
15 Q. (BY MR. MACH) If we go to the left-hand side 16 of slide 33, the last bullet in the Mobile category 17 there, it says "Dish's massive spectrum could leave -- 18 lead to mid-term spectrum deal."	13 A. Yes, I do.
19 Do you see that?	14 Q. What does that mean?
20 A. Yes, I do.	15 MS. LEVIN: Objection.
21 Q. What does that mean?	16 A. Again, this is DT's document. So you'd -- you 17 know, you'd have to ask them exactly what they meant by 18 that.
22 MS. LEVIN: Objection.	19 Q. (BY MR. MACH) Well, what did it mean to you 20 when you had the document in the meeting with DT in 21 2015?
23 A. Well, I presume that means that there was at 24 least a possibility to discuss purchasing spectrum from 25 DISH.	22 A. Well, firstly I don't know that we discussed 23 this page specifically. But I do -- one difference 24 between the U.S. and Europe is in Europe you have 25 mandated and prescribed wholesale rates for MVNOs. Or
Page 63	Page 65
1 Q. (BY MR. MACH) When it says "mid-term 2 spectrum," can you help me understand what the phrase 3 "mid-term spectrum" means? Mid -- I'm sorry, excuse 4 me. Could you help me understand what "mid-term" means 5 in that bullet?	1 you did at the time.
6 A. I don't know what DT specifically had in mind, 7 but I would presume that would mean over the course of 8 a handful of years.	2 Q. In -- in which market?
9 Q. In that same Mobile category there, it says 10 "Regulator unlikely to allow emergence of three-player 11 mobile market."	3 A. I don't recall, but at least in some markets 4 in Europe.
12 Do you see that?	5 Q. Yeah. My point is not the U.S. market, right?
13 A. I'm sorry, where?	6 A. That's correct.
14 Q. It's the second bullet in the Mobile category 15 on the left-hand side of the slide.	7 Q. So do you understand this to be saying unless 8 there is that type of wholesale obligation in the 9 United States, there will not be disruptive MVNO market 10 entries?
16 A. Yes, I do.	11 MS. LEVIN: Objection.
17 Q. And there when it's talking about the 18 emergence of a three-player mobile market, that's 19 talking about the results of a potential merger between 20 T-Mobile and Sprint, correct?	12 A. I don't -- as I say, I don't know what DT 13 meant. What I can tell you is there are MVNOs in the 14 U.S. market that are disruptive. Altice just entered 15 the market with a very disruptive price point. Comcast 16 under the Xfinity mobile brand is an MVNO. And up 17 until Altice entered, they had the lowest priced 18 unlimited single line post paid plan.
21 MS. LEVIN: Objection.	19 Q. (BY MR. MACH) Let's go to slide 40, please.
22 A. I don't know exactly what it's referring to, 23 but that seems -- seems what it's referring to in the 24 document.	20 and we're almost done with this long document.
25 Q. (BY MR. MACH) And the three players referred	21 MS. LEVIN: And might we take a break 22 after we're done?
	23 MR. MACH: Absolutely.
	24 Q. (BY MR. MACH) Are you with me on slide 40, 25 sir?

<p style="text-align: right;">Page 82</p> <p>1 means, but one possibility is that if we were able to 2 combine with DISH and utilize all that spectrum, it 3 would provide us with dramatically more capacity, and 4 so we would need to evaluate that as a potential 5 option.</p> <p>6 Q. Does -- does looking at Ewens Exhibit 62 7 refresh your recollection that you insisted -- you 8 assisted in the preparation of materials for the second 9 workshop in Germany?</p> <p>10 A. We didn't prepare the materials for the second 11 workshop in Germany. We may have been responsive to 12 DT's questions, but those materials were prepared by 13 DT.</p> <p>14 Q. That's fair, and I -- I'm -- I just want to -- 15 want to hone in on the distinction that you're making.</p> <p>16 Mr. Stern prepared the materials for the 17 meeting; is that correct?</p> <p>18 MS. LEVIN: Objection.</p> <p>19 A. I don't know who prepared the meetings [sic] 20 for that.</p> <p>21 Q. (BY MR. MACH) Okay. In any case, you 22 provided information to Mr. Stern that DT could use to 23 prepare the materials for the meeting; is that 24 accurate?</p> <p>25 MS. LEVIN: Objection.</p>	<p style="text-align: right;">Page 84</p> <p>1 that the slide deck used in the second session, 2 workshop session was a good document?</p> <p>3 A. I said the email says I think the document is 4 okay. I don't know what you mean by a good deck.</p> <p>5 Q. Well, I'll introduce an exhibit.</p> <p>6 MR. MACH: I'll ask the court reporter 7 to please mark this as Ewens Exhibit 63.</p> <p>8 (Deposition Exhibit 63 was marked for 9 identification.)</p> <p>10 MR. MACH: And I'm going to 11 simultaneously introduce what will be Ewens Exhibit 64.</p> <p>12 (Deposition Exhibit 64 was marked for 13 identification.)</p> <p>14 Q. (BY MR. MACH) Do you have Exhibits 63 and 64 15 in front of you, sir?</p> <p>16 A. I do.</p> <p>17 MS. LEVIN: Which is which, sir?</p> <p>18 MR. MACH: I will clarify that.</p> <p>19 MS. LEVIN: Thank you.</p> <p>20 MR. MACH: Oh, you mean in front of you. 21 So Exhibit 63 is the document that's also marked 22 Ewens CID Exhibit 42. And Exhibit 64 is the document 23 labeled TMUS-LIT-00198721.</p> <p>24 MS. LEVIN: Thank you.</p> <p>25 Q. (BY MR. MACH) Now, let's start with</p>
<p style="text-align: right;">Page 83</p> <p>1 A. I don't recall whether we provided information 2 for the second workshop, but as we discussed, we did 3 provide information that was responsive to DT's 4 questions that they had in advance of the first 5 workshop. I don't know what other information was 6 provided or not provided between the first workshop and 7 the second workshop.</p> <p>8 Q. (BY MR. MACH) Thank you, sir.</p> <p>9 You thought that the slide deck that was 10 prepared for the second workshop was a good document, 11 right?</p> <p>12 MS. LEVIN: Objection.</p> <p>13 A. What the email says is "I think doc okay."</p> <p>14 And what I meant by that was I think that the 15 document would probably serve to tee up some of the 16 major topics. I did not provide a detailed or do a 17 detailed review of the document, and I certainly didn't 18 have time to engage -- I was very busy at the time and 19 I didn't have time to engage in a word-by-word review 20 of the document or to get into a battle with DT about 21 the document. It was ultimately their document and I 22 thought for the purposes of at least starting the 23 discussion, the document was okay.</p> <p>24 Q. (BY MR. MACH) So I appreciate the 25 explanation, sir, but my question is did you believe</p>	<p style="text-align: right;">Page 85</p> <p>1 Exhibit 63. Do you recognize this as an email exchange 2 between you and Mr. Stern attaching a PowerPoint 3 presentation in December of 2015?</p> <p>4 A. Yes, I do.</p> <p>5 Q. And Exhibit 63 is something that would have 6 been created in the ordinary course of your business, 7 correct, sir?</p> <p>8 MS. LEVIN: Objection.</p> <p>9 A. The email would have been created in the 10 ordinary course. If Exhibit 63 includes this document, 11 we didn't -- didn't create that in our ordinary course.</p> <p>12 Q. (BY MR. MACH) Thank you for the 13 clarification.</p> <p>14 So the email would have been something you 15 would have created in your ordinary course, but 16 receiving materials like the attachment that you 17 received from Deutsche Telekom was a relatively common 18 occurrence for you in your position at DT; is that 19 true?</p> <p>20 MS. LEVIN: Objection.</p> <p>21 A. I can't say one way or another. I mean, we 22 had a very specific agreement that I would participate 23 in the workshop and that they would send me the 24 document ahead of time.</p> <p>25 MR. MACH: So a little bit of</p>

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<p>1 housekeeping. The PowerPoint presentation that's  2 attached to Exhibit 63 is redacted. Exhibit 64 is an  3 unredacted version of a PowerPoint that I understand to  4 be the same document as the one that is attached to  5 Exhibit 63. And I just would ask counsel to verify  6 that they have the same understanding that those  7 documents -- those PowerPoint decks, the one attached  8 to 63 and the one that is 64, are the same.</p> <p>9 MS. LEVIN: Yes, we have the same  10 understanding.</p> <p>11 MR. MACH: Thank you.</p> <p>12 Q. (BY MR. MACH) You don't have any reason to  13 doubt that, do you, sir?</p> <p>14 A. I do not.</p> <p>15 Q. Okay. So let's take a look at the front of  16 Exhibit 63. You received the slide deck that is  17 Exhibit 64 from Mr. Stern, right, sir?</p> <p>18 A. Yes, that's correct.</p> <p>19 Q. And you told Mr. Stern "good document," right?</p> <p>20 A. That's correct.</p> <p>21 Q. Okay.</p> <p>22 A. But again, what I really wanted to -- the  23 focus here was not on a page-by-page review, but  24 basically do we have a document that could serve as a  25 jumping off point for a workshop discussion.</p>	<p>1 don't get sidetracked here.</p> <p>2 Here you list AT&amp;T, Verizon and Sprint, right,  3 among others?</p> <p>4 MS. LEVIN: Objection.</p> <p>5 A. Correct.</p> <p>6 Q. (BY MR. MACH) And this slide deck --</p> <p>7 A. I should -- just -- I should clarify that. I  8 don't list them; DT lists them.</p> <p>9 Q. That's a fair clarification. Thank you, sir.</p> <p>10 And this slide discusses competitive dynamics  11 over the next two to three years, correct?</p> <p>12 A. Yes, that's what I read the slide to discuss.</p> <p>13 Q. Okay. And going back to your previous note --</p> <p>14 I'll strike that.</p> <p>15 Now, let's look at AT&amp;T. The prediction that  16 you received from DT was that AT&amp;T would not engage in  17 price reductions, right?</p> <p>18 A. What this -- this slide says "No price  19 reductions and unlikely to initiate FMC race (if  20 somehow unavoidable)."</p> <p>21 That's what's written on the slide.</p> <p>22 Q. And in the box below that, DT conveyed to you  23 that Verizon had the incentive to keep the market as is  24 and be the last one to reduce prices, right?</p> <p>25 A. I'm sorry, what the slide says is "Incentive</p>
Page 87	Page 89
<p>1 MR. MACH: I'll move to strike that as  2 nonresponsive. You don't need to worry about that,  3 sir.</p> <p>4 Q. (BY MR. MACH) Okay. If you would, please,  5 turn with me to Exhibit 64, we will work with that, and  6 I think you can set 63 aside for now just to keep  7 things organized.</p> <p>8 This was the slide deck that was used for  9 session 2 of your meetings in Germany in 2015, correct?</p> <p>10 A. Yeah. Again, this was a slide deck that was  11 furnished at the beginning of the meeting, but I don't  12 have a specific recollection of how much of this  13 workshop we actually followed the deck or whether we  14 had a different, you know, or related discussion.</p> <p>15 Q. Well, when you sat down for workshop 2 with DT  16 in December of 2015, you had this slide deck in front  17 of you, correct?</p> <p>18 A. We did at the beginning of the workshop.</p> <p>19 Q. So let's turn first to slide 6. Are you with  20 me, sir?</p> <p>21 A. I am.</p> <p>22 Q. And there are three MNO competitors listed on  23 this slide, right, sir?</p> <p>24 A. Can you define "MNO"?</p> <p>25 Q. Well, I'll strike that the question so we</p>	<p>1 to keep market as is - last one to reduce prices (given  2 customer base and premium position) or join FMC (given  3 wireless focus)."</p> <p>4 Q. And -- and whereas DT conveyed that Sprint was  5 likely to continue to engage in aggressive pricing,  6 correct?</p> <p>7 A. I don't know what you mean by "DT conveyed."</p> <p>8 What the slide says is "Focus on turnaround to avoid  9 bankruptcy (aggressive pricing to continue)."</p> <p>10 Q. Well, the slide was prepared by DT and sent to  11 you, right?</p> <p>12 A. That's correct.</p> <p>13 Q. And then at the top, in gray lettering, it  14 said "Potential pressure for price reduction if Sprint  15 recovers."</p> <p>16 Do you see that?</p> <p>17 A. Yes.</p> <p>18 Q. What does that mean?</p> <p>19 MS. LEVIN: Objection.</p> <p>20 A. I don't know what this means. This -- again,  21 this is DT's document; this is not my document.</p> <p>22 Q. (BY MR. MACH) Well, to be clear, I'm not  23 asking what DT meant, I'm asking what -- what it meant  24 to you when you received the document?</p> <p>25 A. I mean, presumably it means that this</p>

23 (Pages 86 - 89)

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Page 94	Page 96
<p>1 Q. Okay. And in evaluating the Sprint deal, DT 2 conveyed to you that four-to -- four-to-three 3 consolidation was in the interest of all mobile 4 players. Do you recall that?</p> <p>5 MS. LEVIN: Objection.</p> <p>6 A. I don't recall the specific conversation that 7 was relayed to me.</p> <p>8 Q. (BY MR. MACH) Would you turn with me to 9 slide 22, please.</p> <p>10 Do you see where it says "Deal likelihood"?</p> <p>11 A. Can I take a minute to read the slide?</p> <p>12 Q. Of course, yes.</p> <p>13 A. Yes, I see that.</p> <p>14 Q. Okay. And what did you understand DT to 15 conveying to you when it -- they said, "Market 16 structure calls for consolidation, four to three in the 17 interest of all mobile players"?</p> <p>18 A. I don't understand what they meant. And 19 again, I can't say that we -- I don't recall going 20 through this slide specifically. I don't know what 21 "market structure calls for consolidation" means.</p> <p>22 Q. Well, Mr. Langheim had expressed to you that 23 he thought it important to take the market from four to 24 three, right?</p> <p>25 A. I think if you go back to the previous emails,</p>	<p>1 Q. (BY MR. MACH) Can you, as you sit here today, 2 can you think of any ways in which four-to-three 3 consolidation could be in the interest of all mobile 4 players?</p> <p>5 MS. LEVIN: Objection.</p> <p>6 A. Look, I think -- as I say, the outcome of 7 four-to-three consolidation depends dramatically on the 8 market and the competitive positions of all the 9 players. So it's certainly a possible outcome, but 10 it's by no -- by no means a -- an ordained outcome or 11 necessary outcome.</p> <p>12 Q. (BY MR. MACH) It's hard to predict the 13 outcome, would you agree with that?</p> <p>14 A. I'd say predicting the outcome depends on 15 having a lot more knowledge about the market, the 16 market structure, competitive dynamics. There are 17 many, many factors that go into the resulting 18 competitive positions of players.</p> <p>19 Q. Now, slightly above that on the same slide it 20 says "Key do's and don'ts to realize TMUS plus Sprint 21 merger."</p> <p>22 Do you see that?</p> <p>23 A. Yes.</p> <p>24 Q. Did you discuss these key do's and don'ts with 25 DT?</p>
<p>1 Mr. Langheim had expressed to me the idea that four -- 2 going -- for the market from four to three might be an 3 option, you know, if -- if you thought that 4 commoditization was such that you wouldn't be able to 5 earn a return on capital. I think Mr. Langheim 6 conveyed to me that he thought four to three might be 7 an option.</p> <p>8 Q. So do you understand how consolidation from 9 four players to three could be in the interest of all 10 mobile players?</p> <p>11 A. It's not -- I don't necessarily agree that 12 four to three is in the interest of all mobile players.</p> <p>13 Four-to-three consolidation has to be evaluated 14 separately for each market and for each mobile player.</p> <p>15 Q. Well, I appreciate that. My question is a 16 little bit different. And that is, did you understand 17 DT's rationale for the statement that four to three was 18 in the interest of all mobile players?</p> <p>19 MS. LEVIN: Objection.</p> <p>20 A. I'm not sure I really fully understood DT's 21 rationale, but this -- this is what the document says 22 and this is DT's document. But the rationale and the 23 conclusion about why that's in the interest of all 24 mobile players, I think is -- you know, I think -- I 25 don't fully understand what DT means by that.</p>	<p>1 A. I don't recall.</p> <p>2 Q. It says "Do not overplay offending 3 consolidation stakeholders."</p> <p>4 Do you see that?</p> <p>5 A. Yes.</p> <p>6 Q. What did that mean to you, sir?</p> <p>7 A. I don't know. It's not even a grammatically 8 correct English sentence.</p> <p>9 Q. It then says "Do not follow Sprint in price 10 wars or irrational MVNO deals (sustain ARPU)."</p> <p>11 Do you see that?</p> <p>12 A. Yes.</p> <p>13 Q. What does that mean to you when you received 14 this deck?</p> <p>15 A. I think what it meant to me was a DT idea that 16 we shouldn't follow Sprint into price wars, but as a 17 general matter, DT doesn't actually set our pricing, we 18 set our pricing independently. We set our pricing 19 based on what we believe we need to compete and gain 20 share.</p> <p>21 Q. At the top of that list it says, as a do and 22 don't, it says "Strengthen lobbying activities for 23 four-to-three merger with the right people in 24 Washington."</p> <p>25 Do you see that, sir?</p>
Page 95	Page 97

Page 98	Page 100
<p>1 A. Yes, I do.</p> <p>2 Q. What did that mean to you?</p> <p>3 A. I don't know what that means to me. I don't</p> <p>4 have any -- any connection with any lobbying</p> <p>5 activities. I don't really have any knowledge of that</p> <p>6 topic.</p> <p>7 Q. Well, did Sprint -- strike that.</p> <p>8 Did T-Mobile strengthen its lobbying</p> <p>9 activities for a four-to-three merger to increase the</p> <p>10 probability of approval of its merger with Sprint?</p> <p>11 MS. LEVIN: Objection.</p> <p>12 A. I don't know. I'm not involved in those</p> <p>13 topics at all.</p> <p>14 MR. MACH: What's the basis for the</p> <p>15 objection; Counsel?</p> <p>16 MS. LEVIN: I'm just curious about</p> <p>17 the -- the ambiguity around what lobbying activities</p> <p>18 means and how you would lobby about a four-to-three</p> <p>19 merger.</p> <p>20 MR. MACH: Okay.</p> <p>21 Q. (BY MR. MACH) Just going back really quickly</p> <p>22 to where it says "Do not overplay offending</p> <p>23 consolidation stakeholders," I know we asked about that</p> <p>24 already.</p> <p>25 Would you take a look at the footnote that's</p>	<p>1 A. Can you repeat the question?</p> <p>2 Q. Why don't I break it up so it's not such a</p> <p>3 confusing question: I'll withdraw it.</p> <p>4 You regularly evaluate opportunities to be the</p> <p>5 buyer in M&amp;A -- for M&amp;A opportunities. Is that fair?</p> <p>6 A. Yes, I think that's fair.</p> <p>7 Q. And you also evaluate opportunities where you</p> <p>8 might be acquired in an M&amp;A transaction. Is that fair?</p> <p>9 A. Do you mean the acquisition of T-Mobile as a</p> <p>10 whole or specific assets from T-Mobile?</p> <p>11 Q. Both.</p> <p>12 A. Well, as a general matter, at T-Mobile US, we</p> <p>13 don't particularly engage in looking at opportunities</p> <p>14 to sell the whole company. That's really DT's</p> <p>15 province.</p> <p>16 Q. Fair enough.</p> <p>17 In your view, might you need to combine with a</p> <p>18 company -- strike that.</p> <p>19 In your view, is it possible that you need to</p> <p>20 combine with another company in order to be successful</p> <p>21 in the marketplace?</p> <p>22 MS. LEVIN: Objection.</p> <p>23 A. Look, as a general matter when we look at M&amp;A,</p> <p>24 we look at the specifics of each M&amp;A opportunity, and</p> <p>25 we don't generalize and say we -- you know, we have to</p>
Page 99	Page 101
<p>1 attached to that and read that for me to yourself.</p> <p>2 Where it says "consolidation stakeholders,"</p> <p>3 the footnote reads --</p> <p>4 A. Yes.</p> <p>5 Q. FCC, DOJ, unions, AT&amp;T, Verizon. That's what</p> <p>6 that means, right?</p> <p>7 A. That's what the footnote says.</p> <p>8 Q. Okay. So why was it important to avoid</p> <p>9 offending AT&amp;T and Verizon if you wanted to merge with</p> <p>10 Sprint?</p> <p>11 MS. LEVIN: Objection.</p> <p>12 A. I have no idea. This is DT's -- as I said</p> <p>13 before, this is DT's document. I don't actually even</p> <p>14 know what this says. It's not a correct English</p> <p>15 translation or translation in English. So I don't</p> <p>16 really know.</p> <p>17 Q. (BY MR. MACH) Based on the materials, it</p> <p>18 looks like T-Mobile regularly looks for M&amp;A</p> <p>19 opportunities. Is that fair statement?</p> <p>20 MS. LEVIN: Objection.</p> <p>21 A. I would -- I would say we look at M&amp;A</p> <p>22 opportunities from time to time.</p> <p>23 Q. (BY MR. MACH) And that includes opportunities</p> <p>24 to be the buyer, but also includes the possibility that</p> <p>25 T-Mobile could be acquired, right?</p>	<p>1 look at each and every opportunity separately and</p> <p>2 figure out how those opportunities might contribute to</p> <p>3 our success.</p> <p>4 Q. (BY MR. MACH) Right. My question is it's</p> <p>5 entirely possible that T-Mobile would conclude that it</p> <p>6 has an M&amp;A opportunity and it needs to take that</p> <p>7 opportunity in order to be successful in the</p> <p>8 marketplace, right?</p> <p>9 A. I think it's entirely possible that T-Mobile</p> <p>10 could conclude that taking an M&amp;A opportunity would</p> <p>11 allow it to be more successful in the marketplace than</p> <p>12 not taking that opportunity.</p> <p>13 Q. Thank you, sir.</p> <p>14 And is it important from a competitive</p> <p>15 perspective for T-Mobile to have flexibility to engage</p> <p>16 in that type of M&amp;A activity if the opportunity arises?</p> <p>17 MS. LEVIN: Objection.</p> <p>18 A. Can you refine your question or can you</p> <p>19 rephrase your question?</p> <p>20 Q. (BY MR. MACH) Yeah. Is it important for</p> <p>21 T-Mobile to have flexibility to engage in M&amp;A</p> <p>22 opportunities if the need arises?</p> <p>23 A. I think it's important for us to continue to</p> <p>24 evaluate M&amp;A opportunities. If M&amp;A opportunities are</p> <p>25 above \$75 million, then we absolutely need to partner</p>

26 (Pages 98 - 101)

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**From:** Ewens, Peter </O=WESTERN WIRELESS CORP/OU=PCS/CN=USER ACCOUNTS/CN=FINANCE/CN=WANEWPORT/CN=PEWENS>  
**To:** Bond, Sarah; Sridharan, Balaji  
**Sent:** 11/29/2015 3:43:59 PM  
**Subject:** FW: AW: Workshop  
**Attachments:** US.business.model\_WS1\_v57.pdf

fyi

**From:** "Stern, Steffen"  
**Date:** Sunday, November 29, 2015 at 1:49 PM  
**To:** Peter Ewens  
**Cc:** "Budde, Matthias"; "Wehrmann, Arne"; "Wiese, Philip"  
**Subject:** AW: Workshop

Dear Peter,

Looking forward to the call tomorrow. In case we decide to jump into the workshop document for next week Thursday, please find attached a current working draft. Final document to be sent out in the next days. Please keep this document confidential.

Best regards,  
Steffen

**Von:** Ewens, Peter  
**Gesendet:** Freitag, 20. November 2015 22:00  
**An:** Stern, Steffen  
**Cc:** Banker, Joan "Joanie"  
**Betreff:** Re: AW: AW: Workshop

Steffen - I will have Sarah on my team send the video materials. I am out next week. Let's shoot for Nov 30. Copying my assistant Joanie

Sent from my T-Mobile iPhone

On Nov 20, 2015, at 12:41 PM, Stern, Steffen <[S.Stern@telekom.de](mailto:S.Stern@telekom.de)> wrote:

Dear Peter,

Sorry for the late reply. Please find below a few explanatory points on in the questions which came up during our analysis. We could discuss them either next week or early in the week thereafter - I understand that you will be on vacation next week (lucky you :)). Just let us know what would work best for you or someone from your team. Any day will do if the call takes place between 7 and 11pm CET (i.e. 10am - 2pm Seattle time)

One further question: We learnt from McKinsey that an US McK team has prepared an analysis on the US TV market / TMUS options in this context. Would you be able to share this analysis?

Thanks and best regards,  
Steffen

**Spectrum scarcity:**

- How serious do you see the spectrum scarcity in the light of potential future offloading?
- What are the economics of more spectrum vs. building more cells – at what point / price does spectrum become

less attractive than investing in denser networks?

- Do you see other ways to deal with spectrum scarcity than investing at spectrum auctions (e.g. increasing network densification, technological solutions, etc...)?

**Backhauling ability/offloading:**

- How important are backhauling capabilities for operators considering the increasing network densification?
- How is the backhaul market structured? Is it easy to get more (dense) backhaul in light of 5G and small cells (considering the lack of TMUS fixed footprint)?
- Role of mobile offloading to fixed broadband for TMUS
- Rationale behind the recently introduced LTE micro cell & how will this develop given increasing popularity of data caps in fixed offers
- What is your view on 5G and the impact of 5G on the telco players?

**Digital adjacencies:**

- Do you see any opportunities/threads from digital adjacencies for TMUS (e.g. IoT, B2B M2M, etc...)?
- What is your view on the (rather fragmented) content rights landscape in the US? Will this change in the future and how will this affect telcos and TMUS?

**eSIM:**

- What is your perspective on the upcoming introduction of eSIM by major device manufacturers in terms of disruptiveness? What is the motivation of handset manufacturers?
- What would be a strategy to avoid being forced into the role of a telco "commodity provider"?

-----Ursprüngliche Nachricht-----

Von: Ewens, Peter

Gesendet: Montag, 16. November 2015 17:22

An: Stern, Steffen

Betreff: Re: AW: Workshop

Steffen - I did catch up with Thorsten in Barcelona. We can get on the phone - just let us know when. Would be great to just send a few lines on the questions in advance so we can be a bit prepared.

Sent from my T-Mobile iPhone

> On Nov 14, 2015, at 12:00 PM, Stern, Steffen <[S.Stern@telekom.de](mailto:S.Stern@telekom.de)> wrote:  
>  
> Dear Peter,  
>  
> As requested, we are re-scheduling the workshop. Most likely, the new date will be Dec 3rd. Our assistant should already be in touch with your assistant to fix the date.  
>  
> I am not aware how far you have been briefed by Thorsten - we are working on the following:  
>  
> In the Dec 3rd workshop, we are comparing the market attractiveness US vs. EU. Specifically:  
> - Current market structure, economic and regulatory environment  
> - Market trends / potential changes in Telco market and future market scenarios (with particular focus on US, including fixed net, Cable, TV/content)  
>  
> In a 2nd workshop later in Dec, we will then focus on the option space for TMUS ("what does it need to be successful in the US market, and how to get there").  
>  
> McKinsey is supporting on the topic. By the way, the McK team is also working on questions regarding "mobile video" - the US seems to be more advanced compared to EU, and recent moves of VZ and AT&T show that both companies are placing bets on this trend.

>  
>  
> One last question - since our last call a few weeks ago, a few more questions came up that we  
would like to better understand. Would you or someone from your team be available for a short  
follow-up call, ideally late next week or the week after (if holidays allow)? So far, it's about  
spectrum scarcity (how serious is it?), mobile backhauling ability in light of future network  
densification needs, and the ability of offloading to Fixed Broadband connections.  
>  
> Looking forward to the discussion!  
>  
> Best regards,  
> Steffen  
>  
>  
> -----Ursprüngliche Nachricht-----  
> Von: Budde, Matthias  
> Gesendet: Mittwoch, 11. November 2015 18:41  
> An: Langheim, Thorsten; Ewens, Peter  
> Cc: Richard, Lilli; Stern, Steffen  
> Betreff: AW: Workshop  
>  
> Peter,  
>  
> let me see what we can arrange - we get back to you asap.  
>  
> Thx  
> Matthias  
>  
>  
>  
> -----Ursprüngliche Nachricht-----  
> Von: Langheim, Thorsten  
> Gesendet: Mittwoch, 11. November 2015 18:39  
> An: Budde, Matthias  
> Betreff: Fw: Workshop  
>  
>  
> Thorsten Langheim  
> 0170-330 1110  
> -----  
> Sent from my T-Mobile BlackBerry  
>  
>  
> ----- Original Message -----  
> From: Ewens, Peter  
> Sent: Wednesday, November 11, 2015 06:38 PM  
> To: Langheim, Thorsten  
> Subject: Workshop  
>  
> Thorsten - I see you scheduled a workshop for Nov 24. I am on holidays that week -  
thanksgiving week and holidays for my daughter.  
>  
> Any chance of moving this to following week?  
>  
> Sent from my T-Mobile iPhone

Discussion document

# DTAG - DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL

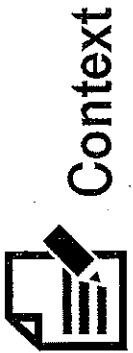
Workshop I  
03.12.2015

T • •



**LIFE IS FOR SHARING.**

# DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL



## Context

DT has 2 large portfolio elements besides Germany and UK: TMUS and DTEU

- **TMUS delivered strong performance** over past 2 years<sup>1</sup> and drives DT's growth
- **EU portfolio has been struggling<sup>2</sup>** and recovery to stable business is uncertain

In consequence, **TMUS gained more importance within DT** (revenues and EBITDA) while the EU portfolio has lost in relevance

However, **stability of TMUS business model in long-run unsure given its sub-scale position**, competitive environment, and potential market changes



## Objective

Create a deeper understanding of differences in US vs. DTEU portfolio market environment, structure and attractiveness

- Identify major trends for the US that can disrupt current telco business models

Develop potential market "end-game" scenarios for the US

Outline options for TMUS to address key challenges in respective "end-game" scenarios (i.e., defining a winning position)

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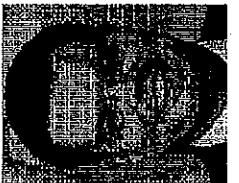
<sup>1</sup> +20% revenue from Q2/13 to Q2/15, +34% total customers from Q2/13 to Q2/15  
<sup>2</sup> -8% revenue from Q2/13 to Q2/15  
Source: DT&G

# WORKSHOP I – PARTICIPANTS AT A GLANCE

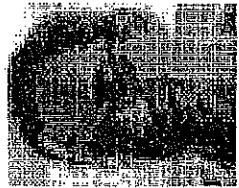


**Thorsten Langheim**  
Head of Strategy &  
M&A DTAG

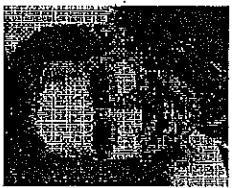
DTAG



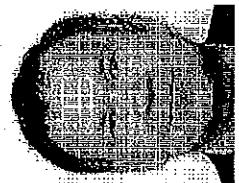
**Matthias Budde**  
SVP Group Strategy &  
Transformation DTAG



**Peter Ewens**  
EVP Corporate Strategy  
T-Mobile US



**Steffen Stern**  
VP Portfolio Strategy  
DTAG



**Peter Bisson**  
Macro trend  
perspective on  
US market



**Ewan Duncan**  
Macro trend  
perspective on  
US market



**Brendan Gaffey**  
Macro trend  
perspective on  
US market

Source: Team Analysis

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# EXTENSIVE EXPERT INTERVIEWS CONDUCTED TO UNDERSTAND MARKET DYNAMICS



**Endre Holen**  
Macro trend perspective on US market



**Brendan Gaffey**  
Macro trend perspective on US market



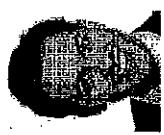
**Stagg Newman**  
Regulatory expert (former CTO of FCC)



**Joy Chen**  
Adjacencies and future business models



**Ewan Duncan**  
Macro trend perspective on US market



**Tomas Calleja Mediano**  
Macro trend perspective  
on EU



**Lars Engel Nielsen**  
Macro trend perspective for EU, FMC  
deep dive



**Martin Wrolich**  
Spectrum scarcity, fixed to mobile trend



**Markus Meukel**  
Expert for eSIM and future business  
models

Source: Team Analysis



# TODAY, THE US TELCO MARKET IS MORE ATTRACTIVE THAN EUROPEAN PORTFOLIO MARKETS

VS. DTEU Portfolio

US

1 More favorable macroeconomic environment



- ~42 TEUR GDP/capita 2015, growing 3% p.a. 2012-20
- 323mn population 2015, growing 1% p.a. 2012-20
- 82% urban population 2015

2 Larger market with more attractive growth prospects



- ~583bn USD telco revenues 2015, increasing 1% p.a. 2012-20
- 3.3% spend of GDP 2015, declining -3% p.a. 2012-20

3 Market with limited competition and different structure



- Limited fixed broadband overbuild
- No nationwide fixed broadband players
- Small role of MVNOs

4 More friendly regulatory environment fostering investments



- Regulator with infrastructure focus
- Reliable and investment friendly spectrum awards
- Stable political environment

5 Customers show higher spend for telco services



- 36 EUR mobile market ARPU Q2 2015
- 71 EUR fixed market ARPU Q2 2015
- 13 EUR weighted mobile market ARPU Q2 2015
- 31 EUR weighted fixed market ARPU Q2 2015

Source: Team Analysis, McKinsey iConsumer service

**T** • **LIFE IS FOR SHARING.**

# US IS A MARKET WITH LIMITED COMPETITION AND DIFFERENT MARKET STRUCTURE

**PREFACED ONLY BACKUP** **WYSI**  
**WYG** **NOT EXHAUSTIVE**

६३

US      Area with at least 2      Area with 1 or no      European portfolio

Area with at least 2 "broadband" providers

18

## European portfolio



Fixed	No nationwide broadband players –
	high geographical fragmentation
	Limited FMC ability
	Limited overbuild for broadband
	Cable key broadband technology

- **Mobile**
  - 2 main players (i.e., from 4 nationwide operators 2 are subscale)
  - MVNOs not significant in terms of market share
- Incumbent and at least 2 further operators common
- MVNOs with significant market shares in Western Europe

1 According to the National Broadband Map defined as a two-way data transmission with advertised speeds of at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream

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## 4 US MARKET WITH MORE FRIENDLY REGULATORY AND POLITICAL ENVIRONMENT (1/2)



US regulation aims at fostering investment



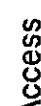
Overall policy objectives

EU regulation aims at enhancing competition and securing consumer welfare



No regulated wholesale access

- No obligation to offer fixed wholesale access
- No obligation to offer MVNO access – MVNOs on commercial terms only



Reliable and investment friendly spectrum awards

- Transparent and reliable auction designs
- Spectrum ownership enables long-term investment perspective
- Spectrum awarded regionally



Unreliable and investment harming spectrum awards

- Intransparent and non-harmonized auction designs maximizing state proceeds
- No spectrum ownership - limited license durations create investment uncertainties and "extortion potential" in future auctions

Source: DTAG, Team Analysis

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~~EXCERPT~~

## 4 US MARKET WITH MORE FRIENDLY REGULATORY AND POLITICAL ENVIRONMENT (2/2)



- Lax consumer protection, net neutrality allows zero-rating
- Very relaxed consumer protection and data privacy policy
- Net Neutrality covers fixed and mobile operators (excl. B2B)

**Services regulation**

- Allows for zero-rating<sup>1</sup>
- “Specialized services” possible and could be prioritized<sup>2</sup>
- Policy driven by case law (“wait-and-see intervention”)

- Strict consumer protection, net neutrality allows zero-rating
- Very strict consumer protection and data privacy policy
- Net Neutrality requirements for all operators (mobile, fixed)
- Allows for zero-rating<sup>1</sup>
- “Specialized services” possible and could be prioritized<sup>2</sup>
- Policy driven by coordinat. approach amongst regulators

**Large scale in-market consolidation currently not allowed**

- 4>3 mobile consolidation currently not allowed
- Large scale cable consolidation was put on hold
- FMC/Video consolidation likely to receive clearance

**Market consolidation**

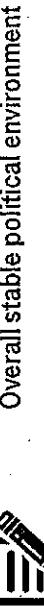
- 4>3 mobile consolidation currently not allowed
- Large scale cable consolidation was put on hold
- FMC/Video consolidation likely to receive clearance

**Overall stable political environment**

- No sudden regulatory measures for political purposes or to close budget gaps
- Changes in political powers do not lead to major alterations
- Enables long-term investment perspectives

**Political environment**

- No sudden regulatory measures for political purposes or to close budget gaps
- Changes in political powers do not lead to major alterations
- Enables long-term investment perspectives



### Very high political uncertainty in CEE

- Special taxes, excessive fees etc. (e.g. HU, ROM)
- Nationalistic attitudes and critical towards foreign ownership
- Investment environment largely dependent on political parties in power
- Compliance issues in several CEE countries

- Special taxes, excessive fees etc. (e.g. HU, ROM)
- Nationalistic attitudes and critical towards foreign ownership
- Investment environment largely dependent on political parties in power
- Compliance issues in several CEE countries

<sup>1</sup> Zero-rating as long as non-discrimination of other similar services, e.g. video; however no throttling or prioritization of services allowed, e.g. video vs. rest of traffic

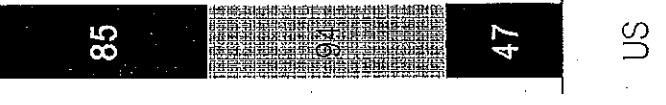
<sup>2</sup> Special services are considered as not being regular internet traffic (such as high-quality VoIP, IPTV) and can be treated differently; definition of “specialized services” not yet finalized in both regions

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## 5 US CUSTOMERS SHOW HIGHER SPEND FOR TELCO SERVICES

Market ARPUs 2014  
USD/month

226



REABON BACKUP

Pay-TV<sup>1</sup>Fixed<sup>2</sup>Mobile<sup>3</sup>

» US mobile ARPUs on average around 3x higher than in DTEU footprint countries

US fixed ARPUs on average more than 2.5x higher than in DTEU footprint countries

US Pay-TV ARPUs on average more than 4x higher than in DTEU footprint countries

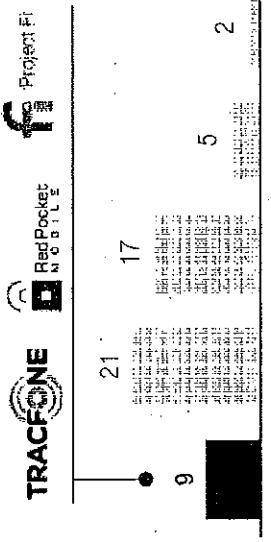
<sup>1</sup>Includes subscription and on-demand revenue via cable, satellite, IPTV and DTT (exc. TV advertising) <sup>2</sup>Based on Mason data <sup>3</sup>Based on DTAG internal estimates  
Source: DTAG, Team Analysis

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# 1 NEW MOBILE ENTRANTS WILL NOT BECOME RELEVANT PLAYERS

## Trend factuals – excerpt

MVNO subscriber market share  
9/6, 2014



Regulation won't support access seeker business models as the FCC values infrastructure investments over competition.

– Expert interview

MVNOs currently with 9% market share

in the US telco market  
(vs. 15%+ in selected Western  
European countries)

US MVNO agreements based on  
commercial terms – all 4 mobile players  
will continue to engage in commercially  
rational contracts

USA	NL	Austria	CZ	Hungary	Poland	Greece	Croatia	Romania	[REDACTED]
21	17	9	5	2	2	1	0	0	[REDACTED]



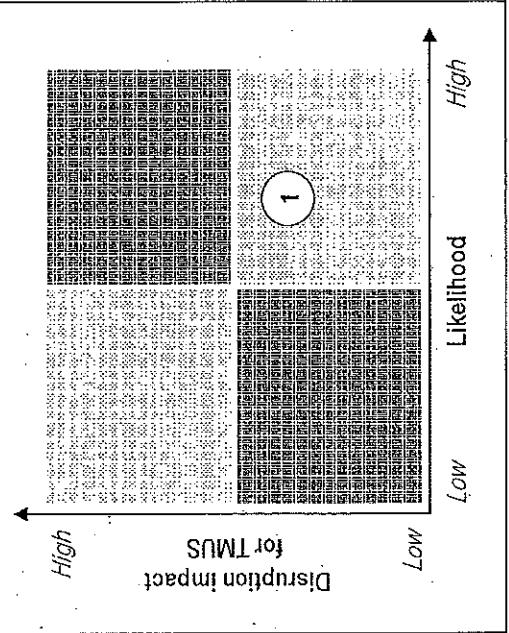
Telco is a scale game. Without  
regulatory and telco support it is  
almost impossible that new mobile  
entrants will be able to disrupt  
the industry.

– Expert interview

## “So What” for TMUS

Trend can be disregarded to define a winning position  
for TMUS

- Continuation of status quo bears no disruption potential for TMUS
- Emergence of MVNO entrants unlikely – however, if they would emerge it bears a disruption potential for TMUS



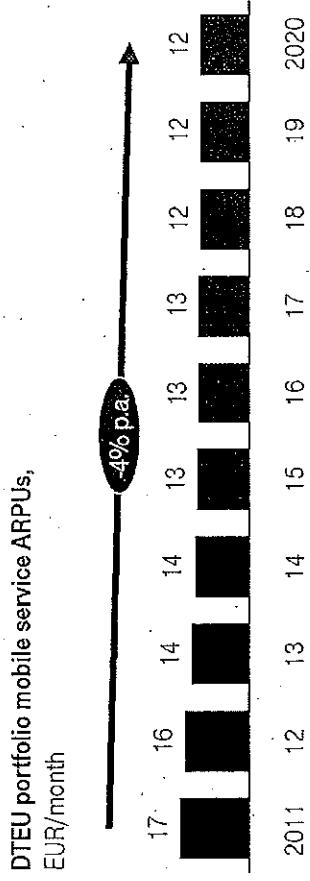
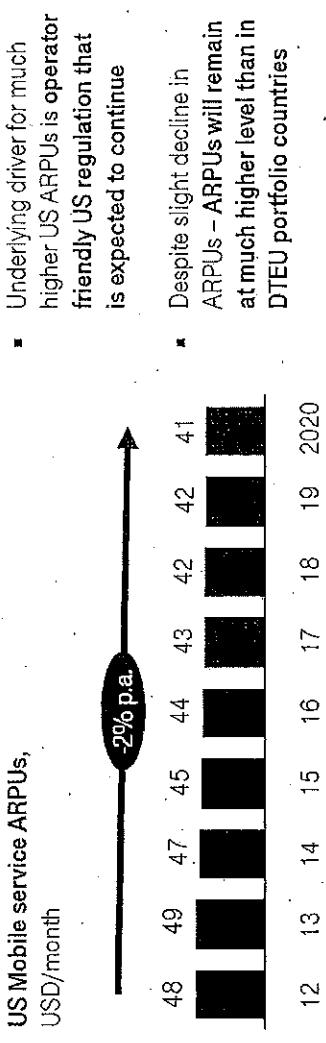
European regulation likely to continue favorable regulation for access seeker business models

Source: Team Analysis, Expert interviews, OvUM

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# 9 US ARPU'S WILL REMAIN ON MUCH HIGHER LEVEL THAN IN EU PORTFOLIO COUNTRIES

## Trend factuals – excerpt



**Future mobile ARPUs expected to stabilize at lower levels in DTEU portfolio countries**

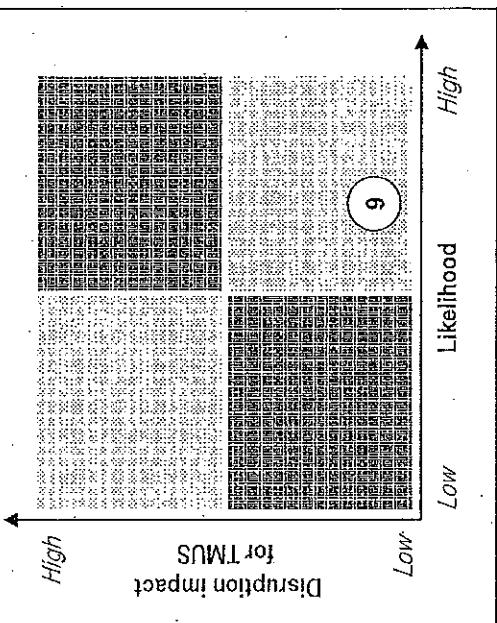
1Weighted average based on the service revenues per country  
Source: Team Analysis

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## “So What” for TMUS

Trend can be disregarded to define a winning position for TMUS

- Continuation of status quo bears no disruption potential for TMUS – US continues to be relatively more attractive than DTEU portfolio markets



## 10 MOBILE/MOBILE AND FMC CONSOLIDATION COULD CHANGE TELCO MARKET STRUCTURE

## Trend factuals - excerpt

- TMUS + Sprint merger regarded as natural strategic move by all experts
- However, regulator unlikely to allow emergence of 3-player mobile market
  - Antitrust policy changing slowly as no direct political influence possible, any changes only likely in mid/long-term via changes in key personnel
- **Consolidation also unlikely under new Democratic administration** and only slight improvements vs. today expected under Republican government
- Dish's massive spectrum could lead to mid-term spectrum deal

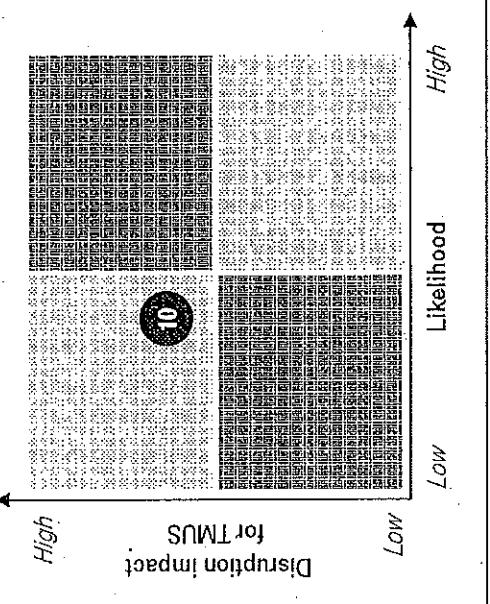
Fixed	<ul style="list-style-type: none"><li>■ <b>Cable players under limited consolidation pressure</b>, since they are winning broadband market share from traditional telcos</li><li>■ <b>No FMC consolidation focus due to limited geographic footprint of cable players</b> (no country wide FMC possible) and given prohibition of previous cable mergers</li><li>■ <b>Many experts eventually expect a Verizon Comcast merger</b></li><li>■ <b>However, "ego issue" of several large market players hinders consolidation</b> (e.g. VZ, Comcast do not want to give up control, Cox Comm. "not for sale")</li></ul>
-------	---

- Video/  
content
- Further consolidation of video services seen as likely (e.g. content player + telco),  
long term success of integrated business models needs to be proven
- Telcos will not end up as content owners and aggregation role difficult due to  
very fragmented content distribution rights

Source: Team analysis, reports, expert interviews

## “So What” for TMUS

- Trend is a scenario relevant wild card – with clear disruption potential for TMUS
- Sprint merger as natural strategic step to obtain scale – however, regulatory approval regarded as unlikely
- Further FMC consolidation might reduce addressable market share for TMUS as mobile only player (if AT&T launches FMC offer and Verizon attempts to merge with Comcast)



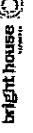
# 11 FURTHER LONG-TAIL CONSOLIDATION TO BE EXPECTED IN THE FIXED NET MARKET

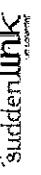
## Trend factuals – excerpt

Manifold recent consolidation (attempts) among large cablecos<sup>1</sup>

 Comcast: Merger between Comcast (#1) and TWC (#2) prohibited  
 Time Warner Cable

 Charter: Charter Comm. (#3) bought TWC (#2) and Bright House (#6)

 Bright House: Altice bought CableVision (#5) and Suddenlink (#9)

 Suddenlink

 CABLEVISION

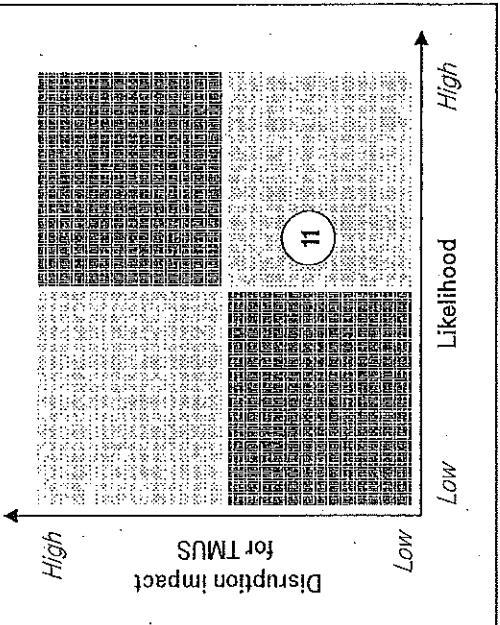
Continued long-tail consolidation to be expected

- Currently still over 400 cable providers in the US (i.e., highly fragmented market)
- Many cable providers are subscale: 93% of the cable providers operate in one state only and only 20 providers cover more than >1 mn people

## “So What” for TMUS

Trend can be disregarded to define a winning position for TMUS

- Continuation of status quo outside of Mobile market bears no disruption potential for TMUS



- D. Goei, (CEO, Altice)

 Everything below Comcast is in consolidation mode

<sup>1</sup> Ranking based on population covered in 2014  
Source: Team Analysis, broadbandmap.com

## REGULATORY ENVIRONMENT REMAINS STABLE IN US AND EUROPE

## Trend expectations – excerpt

DTEU  
vs.  
US

5

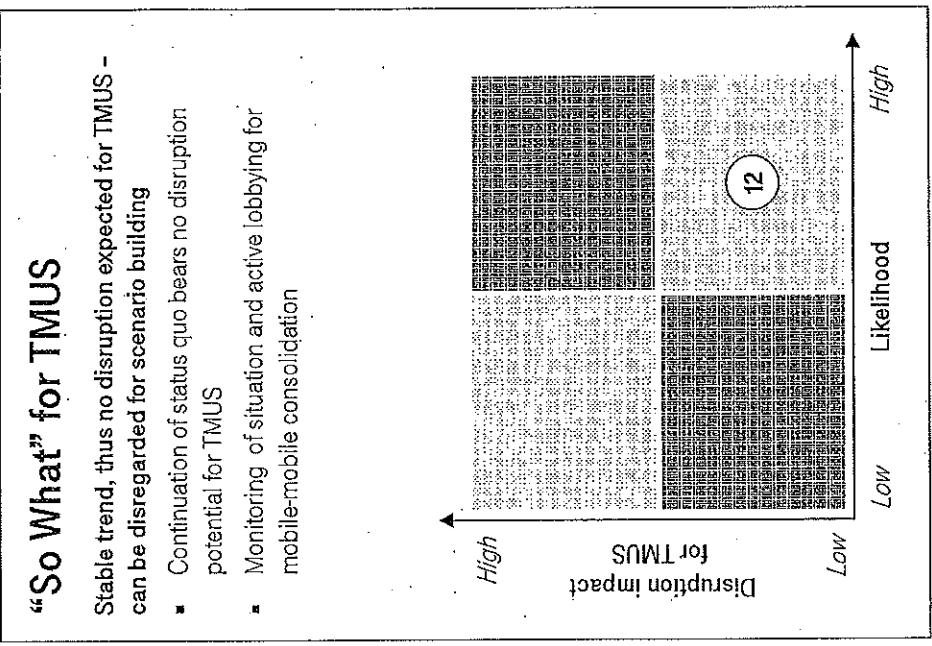
<b>Whole-sale</b>	<ul style="list-style-type: none"> <li>▪ Still no mobile <b>wholesale obligation</b>, thus no new disruptive market entries (MVNOs)</li> <li>▪ No fixed <b>wholesale regulation</b> expected, thus no new market entries by access seekers (e.g., ULL)</li> </ul>	<b>MVNO obligations will likely remain</b>	<ul style="list-style-type: none"> <li>▪ Fixed access regulation might become <b>more lax</b> but significant improvements yet to be seen</li> </ul>
<b>Consolidation</b>	<ul style="list-style-type: none"> <li>▪ 4-&gt;3 merger not expected in the short term</li> <li>▪ <b>Major cable consolidation rather unlikely</b> given TWC-Comcast prohibition</li> <li>▪ Gross-sector consolidation will likely get approval</li> </ul>	<b>4 player mobile markets will remain key objective of EU competition policy</b>	<ul style="list-style-type: none"> <li>▪ FMC consolidation will become more difficult</li> </ul>

*See trend 10 for further details*

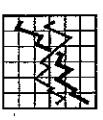
Political environment	Services regulation	Overall environment is stable, slight improvements possible with new Republican administration
■ Services regulation will remain rather lax, but potential increases in regulatory tendencies e.g. in consumer protection, net neutrality	■ Current high level of regulatory intervention on telcos, application to OTTs seen as likely in the future	■ Overall environment mixed and no major improvements in stability or investment-friendliness likely

Source: Team Analysis

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## WRAP UP – US CONTINUES TO BE AN ATTRACTIVE MARKET DESPITE POTENTIAL WILD CARD TRENDS



**1** US continues to have more favorable macroeconomic environment  
vs. DTEU portfolio countries



**2** US continues to be the larger market with relatively more attractive growth vs. DTEU portfolio countries



**3** US continues to have less competitive market structure (e.g., no access seeker business model) vs. DTEU portfolio countries



**4** US continues to have more operator friendly regulatory environment (i.e., to foster infrastructure invests) vs. DTEU portfolio countries



**5** US customers will continue to have higher spend for telco services (e.g., US mobile ARPU will remain ~ 22 EUR higher than in DTEU portfolio countries)



Source: DT&G, Team Analysis

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**From:** Ewens, Peter </o=Western Wireless Corp/ou=PCS/cn=User Accounts/cn=Finance /cn=WANewport/cn=PEwens>  
**To:** Legere, John  
**Sent:** 12/3/2015 1:29:47 PM  
**Subject:** FW: Thorsten

John – as I mentioned below, Thorsten has hired McKinsey to give him independent perspective on US vs rest of Europe outside Germany. US is now much bigger portion of DT market cap than rest of Europe.

On the one hand, US market seems intrinsically more attractive in terms of growth, propensity to spend, ARPU's etc, on the other he is always concerned that US industry structure is broken and we could be headed down a path of commoditization that will make it even harder to improve returns on capital. Workshop today included me and a long-time partner in NY from McKinsey, who I really trust.

We spent some time on structure, but more time on industry conduct – VZ's incentives, potential for Sprint to be irrational, and AT&T's seeming lack of stomach for the consumer wireless battle. As usual Thorsten sees ghosts in many places, but I think we collectively made progress on the idea that the industry is not about to melt down anytime soon – either from Sprint's behavior, Comcast entry in wireless, AT&T or VZ fighting back, Apple and other OEMs driving commoditization through eSIM, etc. I think it's important to stick with Thorsten on these topics because one of his ideas is that if we can't get 4-3 consolidation the industry is headed for commoditization and DT should limit their exposure in the US. Of course, they could do that by selling down – which would be ok with us, we just don't want the constraints on their exposure to come in the form of stricter capital limitations.

Peter

**From:** Peter Ewens  
**Date:** Sunday, November 22, 2015 at 5:27 PM  
**To:** John Legere  
**Subject:** Thorsten

John – I spent some time with Thorsten when we were in Barcelona

He is very much thinking about what we need to be successful over a five year period. They are coming to grips with the idea that there may be no near-medium M&A solution and that it might actually be really good to own us for a while. A key element is getting comfortable that we can be successful as an independent wireless company without wireline – something they are not seeing in Europe. He has retained McKinsey (his idea, not mine) to do a couple of workshops in December to look at future US industry scenarios – first one is Dec 3. I will attend both.

Also, I will be on vacation this coming Tuesday and won't dial into SLT.

Peter

**From:** Ewens, Peter </O=WESTERN WIRELESS CORP/OU=PCS/CN=USER ACCOUNTS/CN=FINANCE/CN=WANEWPORT/CN=PEWENS>  
**To:** Stern, Steffen  
**CC:** Roettgering, Mark  
**Sent:** 12/10/2015 8:29:02 PM  
**Subject:** Re: AW: AW: Workshop

Steffen – I think doc ok. Perhaps we can chat for a few minutes on Monday – 7:30am my time, 4:30pm your time?

Mark Roettgering leads our Pricing group.

Mark – Steffen works for Thorsten Langheim in DT Strategy and may have a few questions on how we think about pricing and our process. In particular, I think questions about how to avoid the kind of deep price battles DT has seen in Europe are likely top of mind.

Peter

**From:** "Stern, Steffen"  
**Date:** Thursday, December 10, 2015 at 5:50 AM  
**To:** Peter Ewens  
**Subject:** AW: AW: Workshop

Peter,

pls find attached a first draft version of the workshop document. As you can see, we are now going with a very slim deck. We will add a few backup pages for the "end game" options – to come asap.

Please let me know if you have any comments / changes / additions. Happy to jump on a call to discuss.

Best,  
Steffen

PS: Is there a contact person in TMUS you could recommend for an exchange on TMUS' pricing strategy?  
(see email below)

**Von:** Ewens, Peter  
**Gesendet:** Montag, 7. Dezember 2015 18:16  
**An:** Stern, Steffen  
**Betreff:** Re: AW: Workshop

Steffen – I think the plan is fine. As you learned, the slides are helpful but what Thorsten really wants is the discussion.

Just a couple notes:

- The strategy options are all about timeframe. In the 10-year timeframe we are unlikely to be an independent company with our current ownership configuration, but I think it's very important to establish that while competition will get incrementally harder each year as we capture the easiest switchers, there is unlikely to be a big structural change to industry profit pools in the next 2-3 years – for all the reasons we discussed. Therefore the "no regrets" organic strategy is to continue smart growth for as long as possible. We can discuss more when we talk.
- TMUS+TWC – I think you mean TMUS+New Charter. Charter is in a three way merger with TWC and Brighthouse, likely to close mid-2016
- It's also possible, although harder, for a joint bid for TMUS by Comcast and New Charter

- TMUS+Dish may not be a 10-year end game, but it extends our runway several years with an unbeatable spectrum position – so we have to include it as an option

**From:** "Stern, Steffen"

**Date:** Monday, December 7, 2015 at 8:55 AM

**To:** Peter Ewens

**Subject:** AW: Workshop

Peter,

for the upcoming workshop on Dec. 16<sup>th</sup>, we wanted to keep the slide material rather slim (as a learning from workshop 1 ;)). Focus is on 3 key agenda points:

- 1) Workshop 1 recap: Market attractiveness US vs. EU, and TMUS challenge
- 2) Future competitive dynamics US
- 3) TMUS options

Detailed agenda with first hypotheses on messages below.

In terms of next steps, I would propose the following:

- we start to create a few slides to have a basis for a structured discussion
- we align with you starting ca. mid of this week to jointly bring the document to a good shape for next week's workshop
- Intensity of iterations as needed

Would that work for you?

One additional request: In the workshop, you mentioned TMUS' outstanding pricing analytics & skills. A team in Group Strategy is currently working on pricing questions and would love to get in touch with one of your experts. Can you recommend a contact for us?

Best regards,  
Steffen

-----

#### Workshop I recap (45mins)

\*\*\* slide 1: US market is and will be more attractive than DTEU portfolio markets  
(Summary of market structure and trend discussion from WS 1)

\*\*\* slide 2: TMUS not in a sustainable position to win in US (ROCE < WACC)  
(Showing ROCE vs. WACC in US for 2014 and 2019E, FCF profile, scale issue)

\*\*\* slide 3: *Hypothesis tbc* - Capital market values subscriber growth and tapping into new growth areas (e.g., advertising/video)

(Mapping of valuation/market cap for key telco players over time with major moves - e.g., AT&T buying DTV, VZ buying AOL)

#### Competitive dynamics (1h)

\*\*\* slide 4: Several distinct player moves can shape US telco market going forward  
(Outline of potential moves for AT&T, VZ, Sprint, Comcast, TWC group)

\*\*\* slide 5: Select player moves will likely go hand in hand - most moves will further weaken TMUS position (if we do not react)  
(clustering of competitive player dynamics according to joint occurrence, implication for TMUS position if we do not react)

#### TMUS options to define a winning position (1h)

\*\*\* slide 6: X options emerge for TMUS in light of competitive dynamics  
(outline/clear definition of option space for TMUS)

\*\*\* slide 7: Y options recommended for further investigation

(Qualitative evaluation of options according to (i) strategic viability, (ii) increasing ROCE, (iii) increasing capital market valuation)

\*\*\* slide 8-13: One pager deep dives for options that are recommended for further investigation (potentially backup in actual WS)

\*\*\* slide 14: At a glance summary of key questions that need to be answered for further option evaluation

\*\*\* slide 15: Preliminary outline of short and mid-term TMUS measures to (i) increase optionality (ii) prepare for specific market developments

(timing of options and outline where we want to be market shaper vs. follower)

**Wrap up and alignment on potential next steps (15mins)**

In terms of long-term market consolidations that TMUS could participate in, I currently see:

- TMUS + Sprint
- TMUS + Comcast
- TMUS + TWC

Dish comes as an "add-on optionality" to add spectrum and TV customers, but not an structural end-game consolidation move as such.

**Von:** Stern, Steffen

**Gesendet:** Montag, 7. Dezember 2015 08:56

**An:** Ewens, Peter

**Betreff:** AW: Workshop

Hi Peter. Thank you for your participation in last week's workshop. Please find attached the final doc.

I will approach you later today regarding how to best tackle Workshop 2 which will come up on Dec. 16<sup>th</sup>.

Challenge will be to provide Thorsten with a clear "so what" even though there is a significant amount of influencing factors in the market which are hard to predict...

Best Steffen

**Von:** Ewens, Peter

**Gesendet:** Samstag, 5. Dezember 2015 00:15

**An:** Stern, Steffen

**Betreff:** Workshop

Steffen – thanks for all your preparation for the workshop. Can you send an electronic copy of the final doc?

thanks



# DEUTSCHE TELEKOM SUPERVISORY BOARD MEETING

DRAFT 3

VIENNA, SEPTEMBER 5<sup>TH</sup>, 2016

ERLEBEN, WAS VERBINDET.

# CONTENT

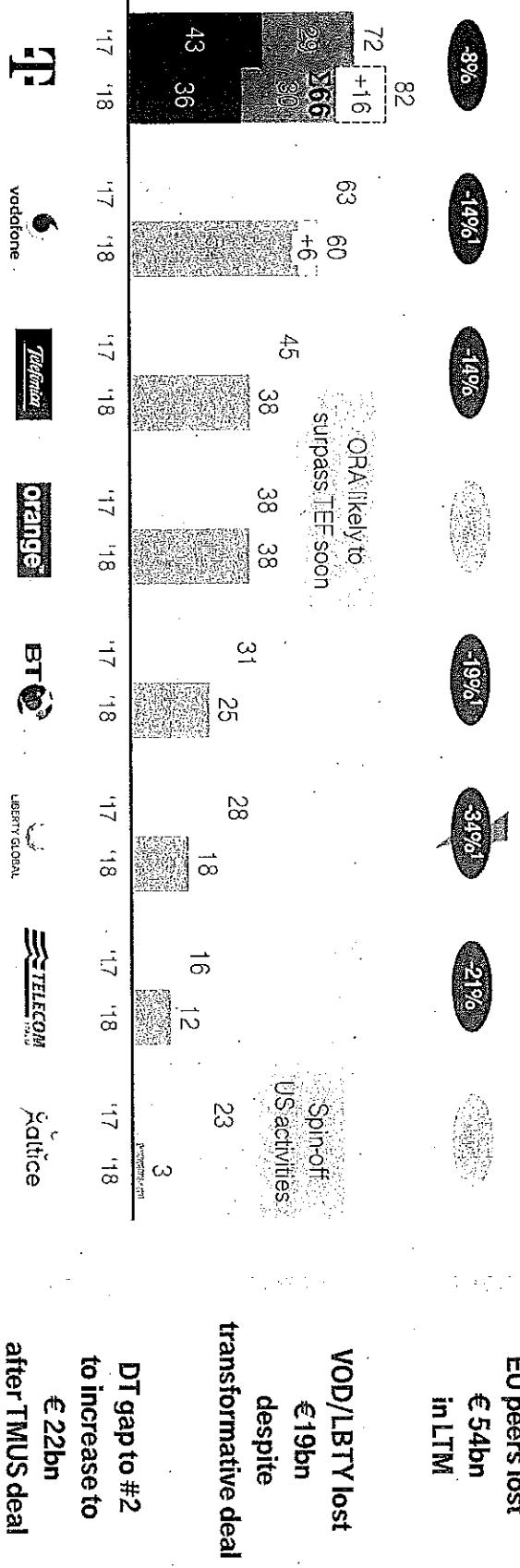
01	WE ARE LIVING IN A NICE HOUSE BUT IN A BAD NEIGHBOURHOOD...
02	LITTLE CREDIT FOR BEING THE BEST POSITIONED OPERATOR IN EUROPE
03	DE NOTA ONE PICK COMPANY
04	FMCG IS POWERFUL – BUT RELEVANCE AND ABILITY TO PLAY DIFFERS ACROSS MARKETS
05	QUO VADIS PORTFOLIO: CONSISTENT CAPITAL ALLOCATION
06	FOCUS TOPICS 2018/19

**P** . . ERLEBEN, WAS VERBINDET.

- Strictly confidential -

# DT UNCO ED IN EU TELCO

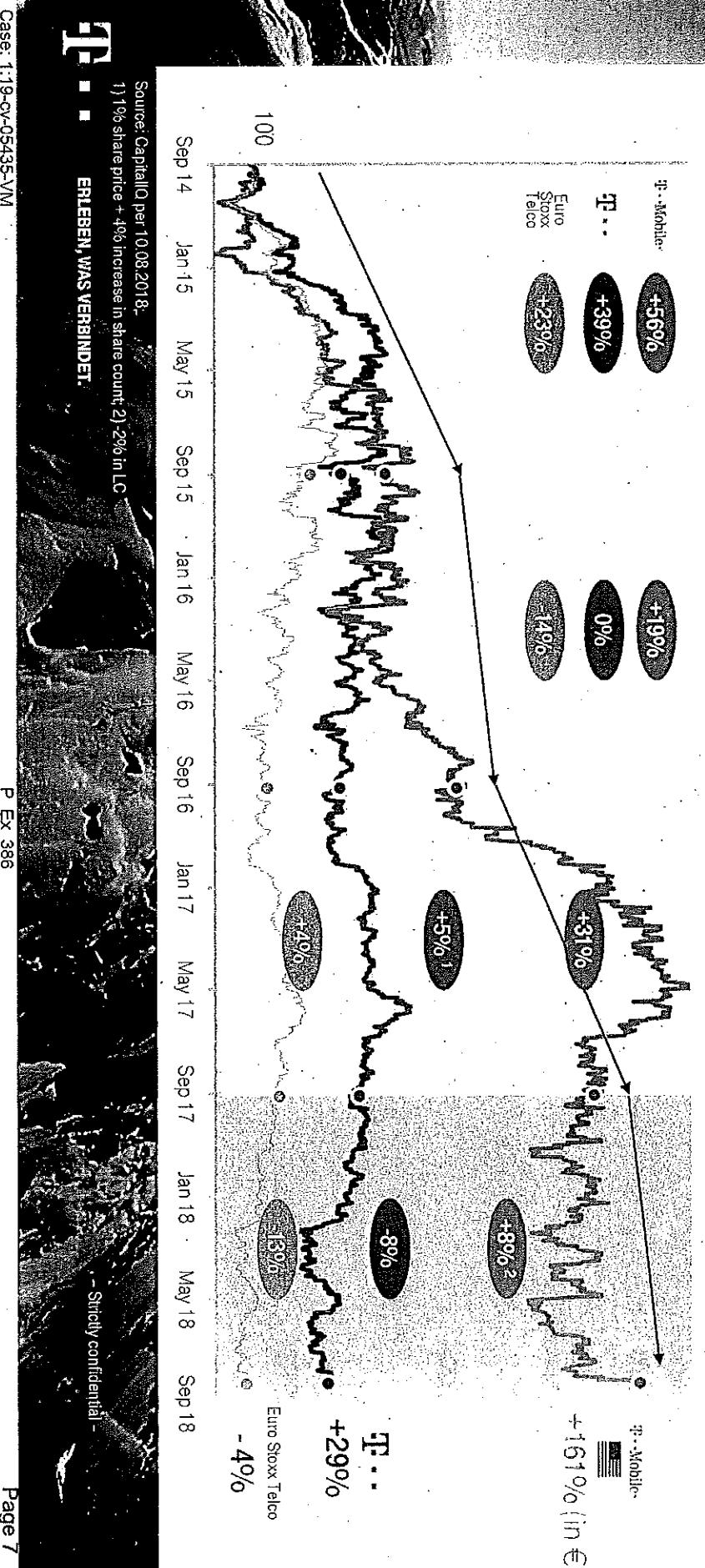
Market cap comparison Aug 2017 vs Aug 2018 (in € bn)



Source: CapitalQ, market caps per 30.08.2017 and 30.08.2018.  
1) 2017-2018 Changes in LC: VOD-11%, BT-22%, LBTY-37%

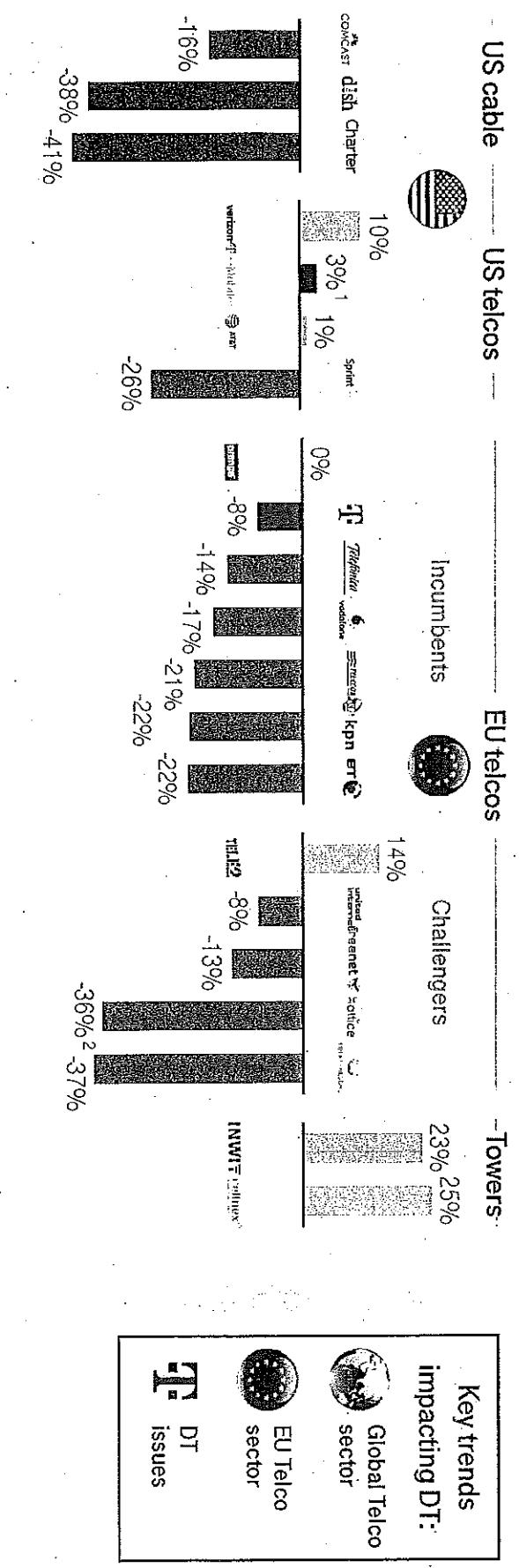
ERLEBEN WAS VERBINDET.

# DT OUTPERFORMED PEERS IN AN INCREASINGLY DIFFICULT TELCO MARKET ENVIRONMENT



# THESE 12 MONTHS DT HAS DECLINED IN VALUE, BUT STILL LESS THAN MOST EU PEERS

Market cap performance (Aug '17 – Aug '18 in local currency)



Source: CapitalQ, market caps dated 30/08/2017 vs. 10/08/2018. Charter by Goldman Sachs, 1) 2017 vs. 2018

2) Altice 2018 PF combining both EU and US Equity Value – source: DT M&A compass

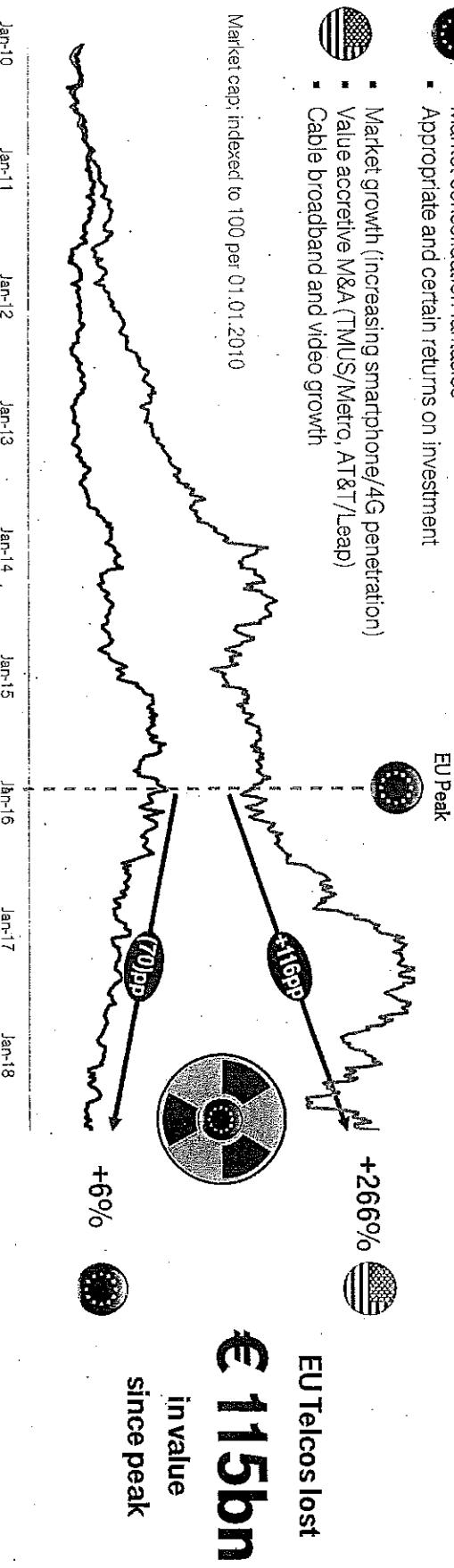
ERLEBEN, WAS VERBINDET.

# THE EU TELECO SECTOR TURNING POINT WAS 2015



What investors got:

- EU single market and regulatory reform hopes
- Market consolidation fantasies
- Appropriate and certain returns on investment
- Market growth (increasing smartphone/4G penetration)
- Value accretive M&A (TMUS/Metro, AT&T/Leap)
- Cable broadband and video growth



Source: CapitalQ, Morgan Stanley. EU Telcos include Deutsche Telekom, BT Group, Telefonica, Orange, Telecom Italia, Vodafone, US Telcos include T-Mobile, Sprint, AT&T, Verizon, Charter, Alice USA, Comcast

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# A TOXIC DE-RATING

## LED TO CONTINUOUS EU TELCO SECTOR



EU Telco sector

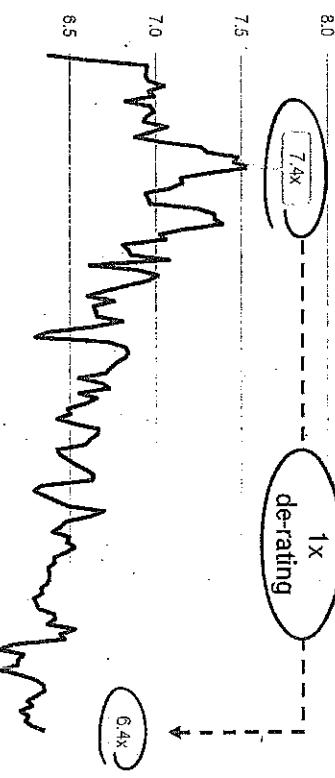
### EU Telco pressure points...

#### ... fueling sector de-rating

EU Telcos<sup>(2)</sup>, EV / NTM EBITDA (x)

- Adverse Regulation
  - Blocked in-market deals
  - Infra freeriding (UK, Sky, VFUJK)
  - Wholesale obligations (AT,CZ)
  - Enforced 4<sup>th</sup> player market entry (NL, IT, BE, DE?)
  - FCC play killed (UK)
  - Net neutrality limitations (US vs EU)

- Investment Overhang
  - FTTH
  - 5G
  - Public pressure on uneconomic buildouts
- Lack of Scale
  - Fragmented markets, inferior scale economics vs. US
  - No cross-border consolidation/politics



### Decelerating Growth

Year-on-Year NTM EBITDA Growth (%)



Source: Capital IQ as of 06-Aug-2018, Broker Research  
Notes: 1. Average growth rate as per broker projections in respective years for Deutsche Telekom, Vodafone, Orange, BT, Telefonica, and Telecom Italia for all operators. European operators include EU Telcos include DT, Telefonica, Orange, BT and Vodafone

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# REGULATORY AT THE CENTER OF TELCO VALUE CREATION – EVAPORATION OF DT MARKET CAP



EU Telco sector

## Regulatory intervention in market consolidation

### Failed mobile consolidation



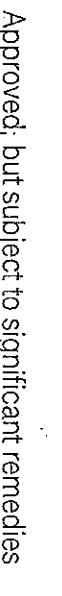
withdrawn



prohibited



withdrawn



withdrawn

### Approved; but subject to significant remedies

approved; subject to  
establishment of 4th MNO

**FCF impact**      **Market cap impact**

**€ 1 bn** ↘ **€ 14 bn**

© Valuation pending

## Increased pressure on incumbents – DT value impacted

### Regulatory measures impacting DT value:

- Mobile and Fixed Termination Rates
- Roaming retail and wholesale price regulation
- Regulatory induced fixed line losses
- Regulatory induced mobile market share losses

Case: 1.19-cv-05435-VM  
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P\_EX\_386

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# THE US MARKET REMAINS MORE ATTRACTIVE THAN EU IN PORTFOLIO MARKETS

## US market more attractive

	
	
<b>More favorable macroeconomic environment<sup>1</sup></b>	
	
<b>Customers show higher spend for Telco services<sup>2</sup></b>	
	
<b>Larger market with more attractive growth prospects<sup>2</sup></b>	
	
<b>Market with limited competition and different structure</b>	
	
<b>More friendly regulatory environment fostering investments</b>	
	
<b>More friendly regulatory environment fostering investments</b>	
	
<b>More friendly regulatory environment fostering investments</b>	
	
<b>More friendly regulatory environment fostering investments</b>	
	
<b>More friendly regulatory environment fostering investments</b>	

1) Year 2017, 2) Q1 2018 market Revenue and ARPU

3) DT Footprint GDP per capita calculated based on aggregation of GDP figures for DT EU subsidiaries in DE, FR, ES, HR, CZ, PL, AT and NL, excl. ALB, ME and MT divided by respective aggregated population

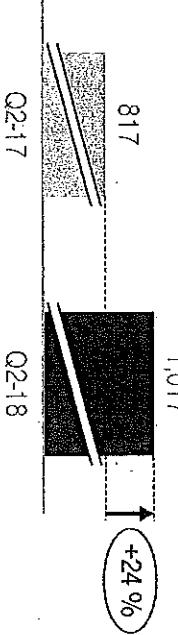
Source: DTAG, Statista, Analysis Margin

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# TMUS'S ORGANIC PERFORMANCE AMID M&A DISTRACTION OVER THE LAST 12 MONTHS

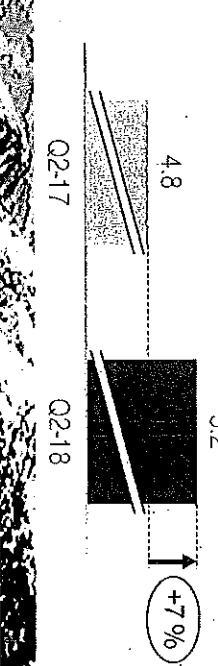
## Outperforming on Net Adds with record low Churn

Branded Postpaid Net Adds (x1000)

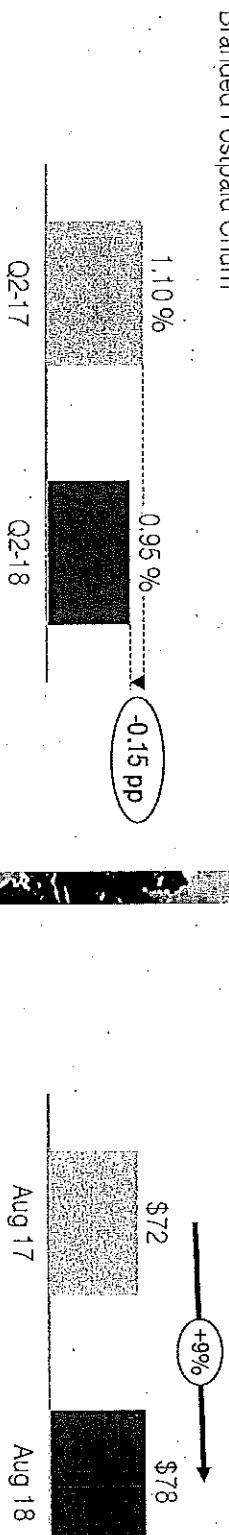


## Sustained revenue growth

Branded Postpaid Revenue (in \$ bn)



## TMUS target share price (in \$)<sup>1</sup>



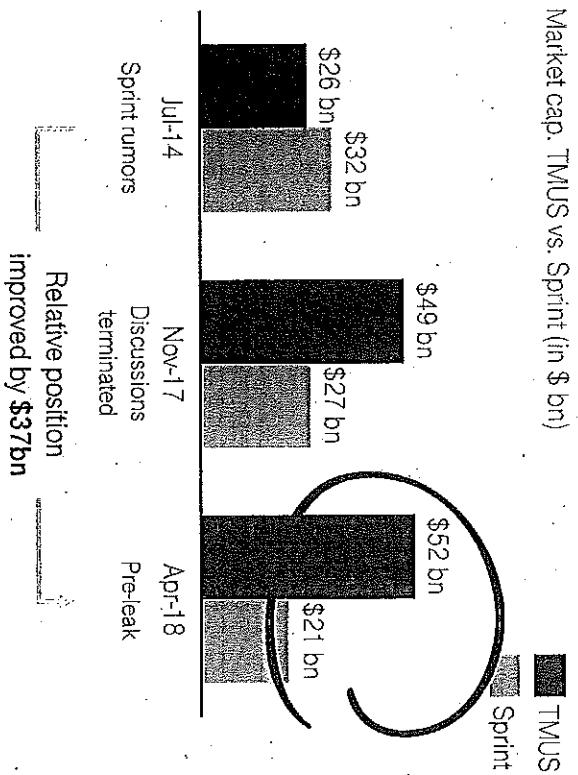
Source: Company public filings -

1) 0-18 month target price

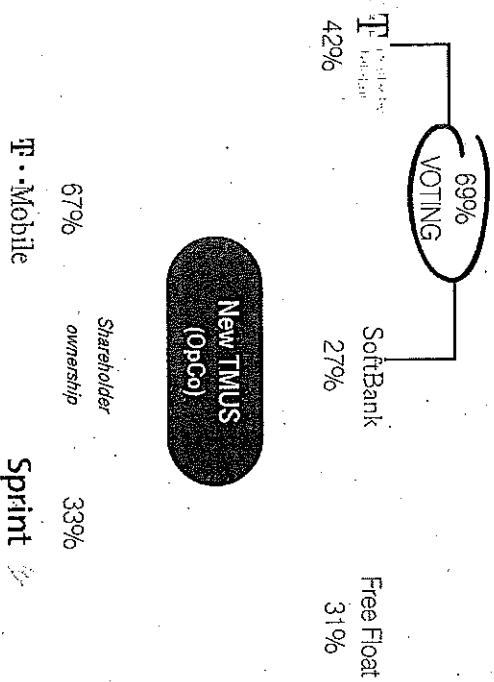
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# PATIENTS GOT OVER THE LAST 4 YEARS - SMARTER STRUCTURE PROVIDES CONTROL

TMUS significantly improved its relative position to Sprint



Creative deal structure enables DT to control New TMUS

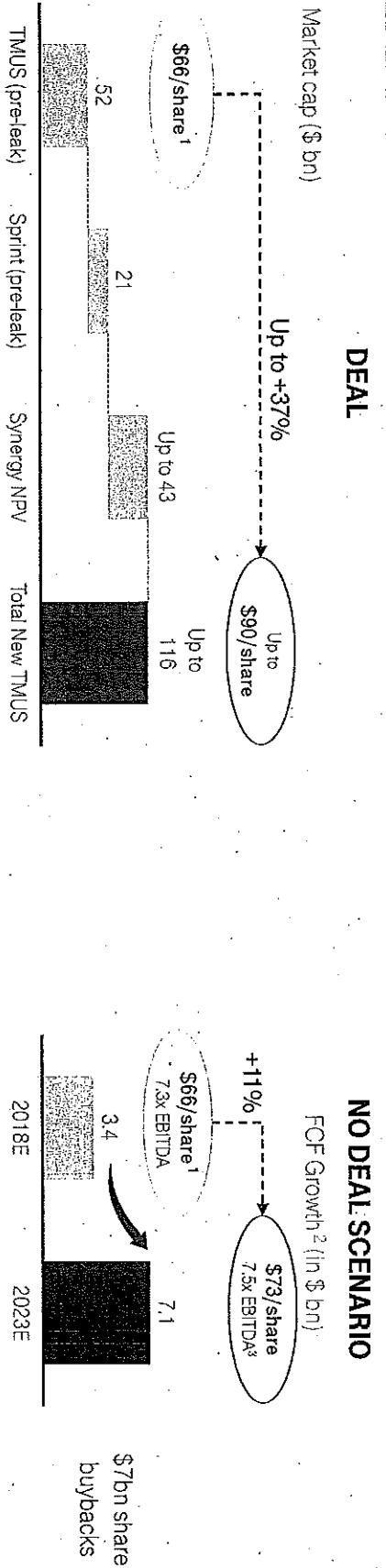


Source: CapitalIQ per 09.04.2018 and 15.07.2014.  
1) Total branded customers Q2 2014 vs. Q1 2018 (figures excludes Lineine subscribers)

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# SIGNIFICANT VALUE UPSIDE AHEAD – IN DEAL AND NO-DEAL SCENARIOS

No deal / standalone scenario provides valuation floor for TMUS above current share price



UP TO ~\$24 PER TMUS SHARE ACCRETION

~\$1-12 PER TMUS SHARE ACCRETION<sup>5</sup>

## BUT INVESTORS CURRENTLY WAIT FOR A DECISION → SHARE PRICE MOVING SIDEWAYS

### Notes:

- 1) As of 10.08.2018
- 2) Based on TMUS projections on a standalone basis. Built 7.5x multiple developed by TMUS management
- 3) Illustrative forward EV/Cash EBITDA multiple reflects mid-point of 7.5x – 8.0x range
- 4) Announced \$6.0bn share buyback program. ~3.5bn shares bought already (expected an additional \$0.5bn expected in 2018 (uninspirative of deal))
- 5) Reflects premium of discounted equity value implied by 7.0x – 8.0x EV/Cash EBITDA multiple above current TMUS price of \$60.00 per share as of 23.09.2018, discounted equity value discounted at 8.0% cost of equity.

P\_EX\_386

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Case: 1:19-cv-05435-VM

# THE DEAL NATURALLY IMPROVES TMUS MARKET POSITION ALSO FOR T-Mobile USA

Reduced the gap with AT&T and Verizon

Aug-17 vs. Aug-18 Market cap (in \$ bn)

Indicating \$43bn  
synergy upside

231

234

196

217

123

53

55

33

25

27

16

192

161

123

121

71

23

13

Position vs Cable improved given value decline

CABLE PLAYERS COME INTO REACH -  
BUT QUESTION IF AND WHEN NEEDED?

Aug-17  
Aug-18

at&t verizon<sup>1</sup> T<sup>2</sup> T<sup>2</sup> Sprint dish comcast T<sup>2</sup> Charter<sup>1</sup> attice

Source: CapitalIQ per 3Q 2017 and 1Q 2018

1) Charter values by Goldman Sachs calculated based on fully diluted shares

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29

# EXECUTIVE SUMMARY

- 1) **WE ARE LIVING IN A NICE HOUSE, BUT IN A BAD NEIGHBOURHOOD...**
  - DT share price outperformed its EU peers over last years and remains largest EU Telco
  - Global Telco shares hit by increasingly difficult market environment characterised by low growth, high leverage and increasing regulatory concerns
  - EU Telco de-rated since 2015 peak driven by "toxic" sector trends, in particular higher regulatory uncertainty
  - DT is facing specific issues, notably high investments, indirect cost challenge, "Schwarzer Peter" risk in fibre, and T-Systems FCF drag
  - Weak sector trends and DT issues result in DT ex-USA ("Trump") devaluation
- 2) **TODAY WE GET LITTLE CREDIT FOR BEING THE BEST POSITIONED OPERATOR IN EUROPE OUTINVESTING PEERS**
  - DT portfolio superior to peers (well balanced with unique US assets and no EM exposure, out-investing peers, with all assets growing)
  - We have been doing the right things (FMC deals, out-investing peers with sustainable growth in reach at DE and EU)
  - However, DT valuation still in line with peers as investors not paying for DT's superior portfolio and outlook, yet
  - Given weak Telco environment, strong execution with tangible results now required to convince markets to improve DT share price beyond current level
- 3) **DT NOT A "ONE TRICK" COMPANY - TMUS AS A HEDGE AGAINST EU REGULATION AND PRESSURE TO BUILD OUT FIBRE EVEN IF UNECONOMICAL**
  - US market remains more attractive than European portfolio markets offering strong organic growth opportunities
  - Plan A (deal with \$42bn synergies) and Plan B (standalone with share buyback) offer material US upside, but the market waits for regulatory outcome before putting money to work
- 4) **FMC IS POWERFUL - BUT RELEVANCE AND ABILITY TO PLAY DIFFERS ACROSS MARKETS**
  - FMC is powerful, but it manifests itself very differently across the world
  - The regulatory position is a key factor for FMC to play out and we allocate capital accordingly
- 5) **QUO VADIS PORTFOLIO: CONSISTENT CAPITAL ALLOCATION - "PREDICTING THE UNPREDICTABLE"**
  - We have delivered on our promises last year (M&A in US, AT, NL and FMC deals in CEE; further development of Towers, NL and DTCP)
  - BT remains challenged and may need to consider NetCo strategy
  - MNO NetCo spin-offs / Activists break-up play - The EU Telco fate? No quick "one size fits all" answer for all markets and assets
- 6) **WHAT KEEPS US BUSY IN 2018/19**
  - We stick to our M&A playbook - EU leading Telco (M&A reflecting sector risk requires patience)
  - Remain focused on closing US and NL deals
  - Stay ahead of the curve on sector trends like NetCo spin-offs and be prepared for Activism

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Page 1

1  
2 UNITED STATES DISTRICT COURT  
3 SOUTHERN DISTRICT OF NEW YORK

4  
5 Case No.: 1:19-cv-05434 (VM)

6 STATE OF NEW YORK, STATE OF )  
7 CALIFORNIA, STATE OF COLORADO, )  
8 STATE OF CONNECTICUT, STATE OF )  
9 COLUMBIA, STATE OF MARYLAND, )  
10 STATE OF MICHIGAN, STATE OF )  
11 MISSISSIPPI, COMMONWEALTH OF )  
12 VIRGINIA, and STATE OF WISCONSIN )  
13 Plaintiffs, )  
14 )  
15 -against- )  
16 )  
17 DEUTSCHE TELEKOM AG, T-MOBILE US )  
18 INC., SPRINT CORPORATION and )  
19 SOFTBANK GROUP CORP., )  
20 Defendants. )  
21 )  
22 )  
23 )  
24 )  
25 )

14  
15 Friday, October 18, 2019  
16 9:40:a.m.

17  
18  
19 VIDEO DEPOSITION OF HANNES WITTIG,  
20 taken by Plaintiff State of New York, held at  
21 Gibson, Dunn & Crutcher LLP, Telephone House  
22 2-4, Temple Avenue, London EC4Y, United Kingdom  
23 reported by Chanelle Malliff, Realtime Court  
24 Reporter of the United Kingdom and Europe.  
25

<p style="text-align: right;">Page 134</p> <p>1 HANNES WITTIG 2 of that. 3 BY MS. WESSELS-YEN: 4 Q. Is that what you did when you were an analyst? 5 MR. SOVEN: Objection. 6 A. This is -- I think my bank wanted me to do that 7 sometimes, so they can create business, but I didn't do it. 8 I described -- as an analyst I was truthful and my 9 motivation was not to -- he is a specialist. It's 10 different. Specialists are on the sales side of the 11 business. 12 BY MS. WESSELS-YEN: 13 Q. Let's go back and look at tab G for one -- oh, I'm 14 sorry, I'm referencing tab G. Let's look at Exhibit 10 for 15 a second please. You can tell it's getting to the middle of 16 the afternoon. 17 A. Going back to my friends at McKinsey. 18 Q. Well, I had a follow-up question about that 19 document actually. I think you testified earlier you 20 thought that McKinsey had put the document together. 21 A. That's my understanding, yeah. 22 Q. What's that understanding based on? 23 A. Well it was characterized at the time as a 24 McKinsey workshop. I remember this. McKinsey participated 25 in this workshop. They wouldn't participate in a workshop</p>	<p style="text-align: right;">Page 136</p> <p>1 HANNES WITTIG 2 BY MS. WESSELS-YEN: 3 Q. Is it possible that some of DT's colleagues could 4 have added information to the document as well? 5 MR. SOVEN: Objection to form. 6 A. Generically possible. I think there are pages 7 where DTAG is mentioned as a source, and there are many 8 pages where DTAG is not mentioned as one of the sources. So 9 I guess we should go by that. Because if it's this explicit 10 mentioning of DTAG, and there is also other pages that do 11 not mention it. And from what I can see it's -- but anyway, 12 I don't know simply. 13 BY MS. WESSELS-YEN: 14 Q. DT has incorporated some of the material from this 15 workshop PowerPoint into its own presentations to its board; 16 correct? 17 MR. SOVEN: Objection to form. 18 A. I think some former seem to have been referenced 19 in future research or presentations, that's correct, from 20 what I can see, but I was not involved in that, neither in 21 this presentation nor in other presentations I used any of 22 this material. I personally never used any of this 23 material. 24 BY MS. WESSELS-YEN: 25 Q. But if you put the page 17 of the workshop</p>
<p style="text-align: right;">Page 135</p> <p>1 HANNES WITTIG 2 that they are not hosting. So my understanding was that 3 it's a McKinsey-led presentation. And there are many 4 participants of McKinsey on that list of people, so I think 5 what I can see in front of me confirms my impression. 6 I need to check again. For instance in that e-mail I say 7 "McKinsey summary" at the end. That's Exhibit 11 anyway. 8 But it's just what I remember. 9 Q. Were you in any way involved with creating that 10 document? 11 A. No. 12 Q. Were you involved with reviewing that document? 13 A. No. 14 Q. Is it possible that some of your DT colleagues 15 could have created that document? 16 MR. SOVEN: Objection to form. 17 A. I don't know. 18 BY MS. WESSELS-YEN: 19 Q. Is it possible that some of them could have 20 reviewed the document and made changes to it? 21 MR. SOVEN: Objection to form. 22 A. A McKinsey presentation usually asks for input 23 from the company and then presents it as a view of McKinsey. 24 That's what consultants do. I was a McKinsey consultant 25 myself. That's what they do.</p>	<p style="text-align: right;">Page 137</p> <p>1 HANNES WITTIG 2 PowerPoint next to page 25 of the board presentation they're 3 substantially similar, aren't they? 4 MR. SOVEN: Objection to form. 5 A. I see what you are seeing and, as I said just now, 6 it's possible that some of these pages were -- or it seems 7 some of these pages were apparently, let's say, used as 8 frameworks in future -- to structure future discussion. But 9 that's all we can say. And I can't -- I didn't do it, so 10 I don't know. But they look similar. 11 BY MS. WESSELS-YEN: 12 Q. Let's mark a new document. 13 (Exhibit 14 marked for identification.) 14 This is Wittig Exhibit 14, an e-mail chain with 15 the beginning Bates number DT-DOJ-00031121 through 00031126. 16 If you would please take a moment to review the 17 e-mails, as well as the, at least the final page of the 18 JPMorgan discussion, please, Mr. Wittig? 19 A. Okay. There's obviously a lot in there so ... 20 Q. Yes. Let's look first at the JPMorgan discussion 21 and this is an e-mail from January 4, 2017 with a JPMorgan 22 newsletter. If you could look at the final bullet point in 23 that e-mail, the one that says: 24 "If Sprint and T-Mobile merge, a much better MVNO 25 rate could be the price of cable support for the deal."</p>